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ON ATRESIA OF THE VAGINA; ITS PATHOLOGY AND TREATMENT.

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The subject of vaginal malformation or occlusion, as a cause of sterility and marital troubles, as well as of menstrual disorders, is one the practical importance of which is evident. Nevertheless, if in current medical literature be rightly reflected the prevailing tendencies of modern gynecological opinion, it would seem that, whilst so much attention is devoted to utero-ovarian and tubal affections, the study of the abnormalities of that passage, on the integrity of which the due performance of woman's sexual functions so essentially depends, is now somewhat unduly neglected. The following observations are therefore submitted in the hope of inducing more adequate consideration of some of those abnormal conditions of the vagina, which are of unquestionable interest from the special difficulties connected with their successful treatment.

In the first volume of the Transactions of the Academy of Medicine, may be found a short communication of mine on the subject of "Cicatricial Occlusion of the Vagina," and in a later volume I described certain other morbid conditions by which, whilst the structural integrity of this passage remains intact, its functional uses in relation to marital life and impregnation were impaired or destroyed. On the present occasion I propose to consider that fortunately rarer, but graver, congenital malformation that is occasionally presented in cases of entire or partial absence of the vagina, by which the patient is not merely incapacitated for marital life, but is also subjected to great physical suffering and danger.

This subject was frequently referred to by the older writers. "One of the most remarkable instances of Nature's wanderings from her accustomed laws,'' observed Dr. Davis,[1] ''is that which consists in the entire absence of the vagina. Cases of this defective formation are not numerous, but they are sufficiently numerous to establish the fact of their existence. Most frequently they are found combined with absence of the uterus, as also with that of one or more of its appendages. When in those cases, says Baudelocque, there has been any passage at all, it but rarely exceeded an inch or an inch and a half in length, and has usually terminated in a *cul-de-sac.*[2] Of this variety of defective development was the case of a porter's wife, related by Morgani, 'in which the external parts of generation were very diminutive, and there was scarcely to be seen a trace of the hymen. The entry into the vagina did not equal the dimensions of the middle finger in any direction; the breadth of the vagina when opened longitudinally and displayed, was scarcely more than two fingers, and there were no rugæ on it. The parietes of the uterus were extremely thin, and the entire organ appeared not to have acquired any increment of bulk since the birth of its subject. There were no ovaries, a deficiency to which may reasonably be ascribed the imperfect development of the vagina and uterus.' ''[3]

Dr. Blundell, who in many instances, though not in this, was far in advance of the gynecological knowledge of his day, shared in the ancient doctrine as to the usual absence of the uterus and general inadmissibility of any reparative treatment in these cases, and says: ''When the closure above (of the vagina) is not partial, but reaches throughout the whole extent of the genital passage, the case scarcely admits of a remedy, nor indeed will the catamenia form.'' Many years later the same view was supported by a surgeon to whom modern gynecology owes much of its development, viz., the late Dr. Marion Sims, who says: ''I have seen five cases of congenital absence of the vagina, and in all of them there was no uterus.''[5] Dr. Macnaughton Jones observes: ''If the vagina is congenitally absent there is often no uterus as well.''[6] Dr. Bousquet,[7] of Marseilles, not long since recorded a case of this kind in the Gynecological Transactions, and in the recent American Cyclopedia of Gynecology we find the old opinion on this point still sustained: "The whole canal may be absent, a condition which is commonly combined with absence of the uterus, but in other cases a normal uterus is found conjoined with the closed vagina."[1]

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[1] Davis, Obstetric Medicine. Vol. ii, p. 24. London: 1824.

[2] Baudelocque's Midwifery, translated by Heath, Vol. i, p. 215.

[3] Morgani, De Sedibus et Causis Morborum, Epist. 46, Art. XXI. Venice: 1760.

[4] Marion Sims, Uterine Surgery, p. 349. London: 1866.

[5] Macnaughton Jones, Diseases of Women, 3d Ed., p. 418. London: 1888.

[6] Transactions British Gynecological Society. Vol. i, p. 218. London: 1886.

The doctrine supported by the authorities just cited would point to the general inadmissibility of reparative treatment in such cases. Fortunately, however, this often reiterated view is, as I believe, not correct, as a general rule. Since the celebrated case reported years ago by Amussat[2] of successful formation of an artificial vagina, a good many others of the same kind have been from time to time reported in disproof of former views concerning the necessary connection between utero-ovarian and vaginal developmental lesions and the impossibility of reparative treatment in the latter. Even yet, however, the number of such cases successfully treated is by no means large, and hence it may be of interest to here record three additional cases illustrating the treatment of congenital absence of the vagina. The most recent of these occurred a few weeks ago in my clinic in the Mater Misericordiæ Hospital, where the patient was admitted under the care of the senior surgeon, Mr. Hayes, by whose kindness she was subsequently, on his examination and diagnosis of the true nature of the case, transferred to my wards.

The subjoined notes are supplied by my clinical resident, Mr. T. G. Dillon, to whose unremitting attention the fortunate issue of the case is largely due:—

Case I.—M. G——, aged 17, a tenant farmer's daughter, living near Ballyhaunis, county Roscommon, admitted to this hospital, August 16, 1889. She had never menstruated, and complained of constant pain in her back for the past three years; and on palpation a swelling, as large as the fetal head at full term, before her admission had been discovered in the region of the uterus. This felt hard and movable, and was diagnosed to be a uterine tumor. At a certain period each month this swelling grew larger, and the pain in her back became more severe for a few days, when both gradually subsided. The mammæ and external genitals were well developed. On the 3d of November a minute recto-abdominal examination of the case, under chloroform, was made by Dr. More Madden, to whose ward the case had been transferred, assisted by Dr. Duke, with the result that he discovered there was complete atresia of the vagina from ¼ inch below the opening of the urethra. He decided on operating for the defect, which he did November 7th. The patient being placed in the lithotomy position, a transverse incision was made through the vulval *cul-de-sac*, and thence continued upwards and backwards in what should have been the axis of the vagina by breaking through with the handle of a scalpel the dense cellular interspace between the bladder and rectum, the integrity of which were carefully guarded by the use of the sound in the former and the retention of the operator's index finger in the latter. In this way a passage nearly six inches in length was cautiously made to the uterus. This being globular, and no trace of the cervix or os tincæ being apparent, an incision was then made with a bistoury into the most prominent accessible part of the uterus, through which a large catheter was passed into the cavity, giving exit to a quantity (about 40 ozs.) of dark colored, tarry blood, which, on examination, proved to be menstrual fluid; at the same time the tumor in the abdomen began to grow smaller, and on pressing over the region of the uterus the discharge came away more quickly, which showed the tumor to be nothing else than a hematometra, or collection of retained menstrual fluid, that had been pent up in the uterine cavity. The uterus was then carefully washed out with an antiseptic solution, and a drainage tube introduced into it, and the new vagina plugged, first, with iodoform gauze, and subsequently with cotton wool, soaked in glycerine of borax, the plug being removed and a fresh one put in twice daily, the uterus and vagina being douched at the same time through the drainage tube, until the walls of the new vagina had healed over and the temperature subsided to normal. On the day after operation the temperature rose to 104°, with a pulse of 140; and, though there was no evidence of metro-peritonitis, for some time her life hung in the balance, the symptoms pointing to septicemia. These, however, gradually yielded to treatment. After the first week the main difficulty consisted in overcoming, by repeated dilatation, the great tendency to contraction of the new vagina. Ten days after operation a quantity of blood, similar in appearance to the catamenial discharge, was passed through the drainage tube. Patient is now apparently quite well, and has a vaginal passage which easily admits two fingers. On December 7th normal menstruation occurred.

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[1] American System of Gynecology and Obstetrics. Vol. i, p. 258. New York: 1887.

[2] Amussat, Gazette Médicale, December, 1835, p. 785.

For the particulars of the following instance of congenital deficiency of the vagina, I am indebted to my colleague, Mr. Coppinger, Surgeon to the Mater Misericordiæ Hospital, by whom it was successfully operated on:

Case II.—H. K——, a thin, delicate looking and poorly developed girl of 18, was admitted, says Dr. Coppinger, under my care into the surgical wards of the Mater Hospital, May 10, 1889, complaining of pain in the back, and of a tumor which was supposed to represent a psoas abscess. A superficial examination and inquiry into the history of the case sufficed, however, to prove that the tumor, which was about the size of an infant's head, and occupied the hypogastric and left lumbar regions, was not an abscess, but a collection of retained menstrual secretion. An examination was now made under ether, when the fact that there was a complete absence of vaginal orifice, and apparently of vagina, was elicited On May 26th the patient was placed in the lithotomy position, and with a finger introduced into the rectum and a metal male catheter, held by my house surgeon, Dr. W. A. Morris, in the bladder, an incision was made in the middle line from about half an inch below the urethral orifice downwards for about an inch toward the anus. The recto-vesical septum was quite thin, and great care was necessary in order to avoid wounding the mucous membrane of the rectum on the one hand, or that of the bladder on the other. The two membranes were ultimately separated, for about three inches, before some loose areolar tissue was reached, and this was tunneled with the finger until the abdominal tumor on its pelvic aspect could be felt. On pressing the latter from the front of the abdominal wall downwards, fluctuation could now be appreciated. Nothing resembling an os uteri could, however, be discovered, so a trocar was thrust upwards in the middle line into the centre of the tumor. No fluid at first appeared, but, on passing a large aspirating canula along the same channel and pumping vigorously, some semi-fluid substance, jet black, and resembling tar in consistency and appearance, was evacuated. The canula was now removed, the opening widely dilated by means of Dr. More Madden's cervical dilator, and a quantity of weak corrosive sublimate fluid passed into the cavity by means of an irrigator. In this way about a quart of tarry fluid was gradually evacuated, a drainage tube was introduced through the new vagina and new os, into the cavity of the uterus, and the patient, after an operation which occupied more than an hour, sent back to her ward. There was no subsequent rise of temperature, but great difficulty was experienced in keeping open the new vaginal tube. With this object the patient was repeatedly etherized, drainage tubes of various descriptions being used. Indeed, but for the care and attention of my late house surgeon, Dr. Morris, the operation would, I believe, have failed in its ultimate object. In the end, however, normal menstruation was established, and the girl left the hospital cured. I may mention that I heard from the country to-day (December 17th) that she is in good health.

Dr. Duke, Gynecologist to Stevens' Hospital, has kindly furnished me with notes of another case, under his care, also illustrating the successful treatment of this condition:

Case III.—M. C—— was brought to me at the Rotunda

Hospital by her mother, who informed me she had never menstruated. As she was only 17 years of age I adopted the usual routine treatment—hot baths, iron and aloes, etc.—but finding it of no use I made an examination and could find no trace of vagina; there was a dimple only where the orifice should be. The patient was poor, and I had no assistant at the operation but her own mother, who, being a sensible woman, did as she was told. I administered ether, tied the patient up, and, having previously determined by finger in rectum and sound in the bladder that a uterus existed, I worked my way with the finger and scalpel up to the cervix uteri, which was elongated and with the characteristic pinhole os. On making pressure over the uterus menstrual blood exuded, but only a small quantity. I plugged the newly-made canal with wadding, soaked in glycerine and carbolic acid, and after a few days inserted a glass plug. The patient menstruated naturally while the glass plug was being worn, so I removed it, and I heard the girl got good health, till I lost sight of her, as she then went to some part of the country with her relatives.

A case of obliteration of the vagina, treated under circumstances that are, fortunately, no longer possible, was reported by Dr. Upshur, of Norfolk, Va., in the Philadelphia *Medical Examiner*, August, 1853. As that case has not, as far as I am aware, been referred to by any subsequent writer, it may be here briefly quoted:

''Cases of this kind,'' remarks the reporter, ''are fortunately very rare, and not more than six appear to have been reported during the last thirty years. The operation in this case is like one performed by M. Amussat, under similar circumstances, in 1836, except that Dr. Upshur completed his operation at once, whereas M. Amussat made three or four separate attempts at intervals of three days. The subject of this case was a negro girl, aged 18, the property (*sic*) of Dr. Southall, of Smithfield. She was admitted into the Norfolk Slave Infirmary, October 8, 1852. About eighteen months previously she commenced to have symptoms characteristic of the approaching catamenia, recurring every four weeks, but without any discharge from the vagina. A round, well defined tumor had gradually appeared above the pubes, becoming larger after every return of the menstrual symptoms, and giving the appearance, when she entered the infirmary, of one advanced to the fourth month of pregnancy. Eight months ago she began to suffer from distension, and recently the pressure of the tumor upon the rectum and bladder has given her a great deal of pain. Upon examination the finger passed into the vagina only about an inch and a half. On introducing one finger into the rectum, and a catheter into the bladder, the finger came in contact with the catheter just behind the terminus of the vagina; nothing appeared to be between them but the coats of the rectum and bladder. The tumor could also be felt from the rectum, sinking low down into the pelvis, and giving decided fluctuation when gently struck. The operation was performed on the 15th of October. The bladder and rectum being first evacuated, chloroform was administered, and an assistant retained a catheter in the bladder, so that it could easily be touched with the forefinger of the left hand introduced into the rectum. The operation was commenced by perforating the centre of the obstruction with an ordinary trocar, which was pushed in to the depth of an inch, and the opening widened by a crucial incision with the scalpel, so as to admit the forefinger of the right hand. The speculum was now withdrawn, the finger introduced, and the obstructing tissue *torn* in every direction. The unyielding nature of the tissue rendered this part of the operation tedious and difficult. The speculum was then again introduced, and was arrested apparently about an inch short of the os tincæ. Pressure being still made upon the tumor, Dr. Upshur carefully divided layer after layer with the scalpel, until he reached the os tincæ, a fact which was immediately made known by an abundant flow of a fluid, resembling tar in color and consistency, and perfectly inodorous. This operation was followed by a severe attack of metroperitonitis, from which she recovered; and on the 5th of November Dr. Upshur was able to make an examination; but there was so much contraction as barely to admit the forefinger up to the os tincæ; the constriction, however, was dilatable, and he introduced a sponge tent, which, in the course of a few hours, had to be removed by the nurse, but was again introduced on the next day, and borne with less inconvenience. On the 12th of November the catamenia returned, the quantity and color being natural. On the 20th Dr. Upshur found that the contraction of the upper end of the vagina had increased; it would scarcely permit his forefinger to pass. The sponge tent was continued until she left the house on the 27th. On the 27th of April last the patient was again sent to the infirmary. She stated that, until two months before, she had regularly had her monthly flow. Upon examination it was found to be impossible to reach the os tincæ, although there seemed to be an opening up to it. The speculum was introduced, and an attempt to find the opening made with a probe, but without success. No tumor could be felt from the rectum, and yet there was reason to believe that there was menstrual blood locked up in the cavity of the uterus. A second operation was contemplated, but it was deemed expedient to communicate with her master first. Meanwhile, however, the patient was seized with a profuse discharge from the vagina, of dark, grumous blood, more fetid than the pus from a rectal abscess. This continued for five days, with entire relief to all the symptoms. Before any further examination was made, a message was received from Dr. Southall, that her services were required at home, and that he would not have another operation performed yet."

Forty-one years ago the subject of this communication was comprehensively discussed by M. Bernutz, in the first volume of his work on "Diseases of Women,"[1] which, in an abreviated form, was subsequently translated by the late Dr. Meadows. A few of M. Bernutz views, and cases relating thereto, may be here referred to as bearing on the question now under consideration, namely, the operative treatment of congenital malformations and obliterations of the vagina.

"These latter," observes M. Bernutz, "sometimes occupy the whole vagina, as in the case of M. Debrou;[2] sometimes, on the contrary, they only occupy a limited portion of that canal, and more frequently it is in the middle than any other part. * * * The following cases, with their *post-mortem* examinations, all exhibit the same deformity, viz.: dilatation of the tubes, and the escape through them into the peritoneal cavity of the blood contained in the genital organs: * * * Cases of congenital obliteration of the vagina," says Sir B. Brodie, "are more common than is supposed. * * * Once a patient consulted me at St. George's Hospital; she was operated on, but would not remain in the hospital, and she died of peritonitis at her own house. In another case treated in the hospital, a short time after puncture of the vagina, symptoms of acute peritonitis set in, and she died. At the *post-mortem* examination we found in the abdomen a great quantity of menstrual fluid. It was impossible to explain the presence of the liquid blood in the abdomen, other than by supposing that it had passed from the uterus through the tubes into the peritoneal cavity."[3]

The following case, recorded by M. Locatelli,[4] is also cited by Bernutz:

"A girl aged 26, began when 20 to suffer symptoms of retained menstruation, which subsequently recurred every month. On examination there was found to be complete occlusion of the vagina at about its middle; an abdominal tumor, the size of a fetal head, was felt over the uterus; fluctuation was obtained at the vaginal obstruction, this was incised and about 8 ounces of black, coagulated blood mixed with mucus was evacuated; pressure on the tumor favored this evacuation. Peritonitis set in, and death on the second day. On making a *post-mortem* examination there was found, peritonitis with a sero-purulent effusion mixed with a little putrid blood in the left iliac fossa; the uterus was about the size of a fist; the fallopian tubes were adherent to the ovaries, and were distended with black blood. The left tube was the size of a turkey's egg, and had ruptured."

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[1] Clinique Médical sur les Maladies des Femmes. tom. i, part 1. Paris: 1848.

[2] Obs. de M. Debrou, Gazette Médical, 1851, p. 32.

[3] Sir B. Brodie, London Medical Gazette. Vol. xxvii, p. 810.

[4] Locatelli, Sept. 1848, Gazette Medica di Milano, cité dans l'Encyclographie Belge, 9^e serie, tom. i, p. 268. Bruxelles: 1848.

It may not be superfluous to observe that the operative procedure necessary in attempting the formation of an artificial vagina in cases of congenital atresia of this passage, is not such as may be safely undertaken, without great caution and some special experience. by any surgeon. Dr. Emmet says: "All writers agree as to the danger of allowing long retention of menstrual fluid, and are equally in accord as to the risk to life for the woman from any procedure instituted for the purpose of evacuating the contents of the distended organ."[1] In examplification of this observation I may cite the following record from the practice of an ancient chirurgeon, whose boldness was apparently ill-warranted by his particular skill in this instance. DeHaen, by whom this case is narrated, was a distinguished pupil of Boerhaave, and, in the early years of the eighteenth century, was one of the most eminent practitioners and prolific writers of his day in Vienna, where he published no less than sixteen copious volumes of his "Ratio Medendi in Nosocomio Practico," from the third tome of which the following case is even yet worth disinterring, as a lesson and a warning:

"A lady, 24 years of age, after having tried for eight years such remedies as seemed best calculated for exciting the menstrual discharge, became affected with a large hard swelling of the abdomen. At length it was discovered that imperforation of the vagina was the sole cause of all the bad symptoms which the patient had long endured. An incision was made, which enabled the operator to introduce his finger into a large cavity, and which gave vent to a considerable quantity of blood. It was thought that an opening had been made into the vagina; but, the patient having died three days afterwards, it was seen that a mistake had been made, as the cavity, into which the finger had been introduced, was that of the bladder. The vagina was closed below by a substance, one inch in diameter and half an inch thick. The upper part of this passage, the uterus, and the Fallopian tubes, were exceedingly enlarged, and filled with a dark-brown, sanious fluid. A similar fluid was found extravasated in the abdomen, through a rupture which had taken place in the Fallopian tube. The ovaries were in the natural state."

It should be here observed that the fatal event in DeHaen's case, might not, perhaps, be altogether ascribed to his unfortunate operation, inasmuch as a similar result has very frequently followed successful attempts to relieve hematometra—an operation which is occasionally succeeded by intra-peritoneal hemorrhage. This, according to Bernutz, whose opinion is confirmed by Graily Hewitt and other more recent authorities, is due to the contraction of the uterus, set up by the evacuation of the fluid, continuing and forcing the blood contained in the Fallopian tubes into the peritoneal cavity.

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[1] Emmet's Gynecology, p. 209. New York: 1882.

[2] De Haen. Op. cit. Part VI., Vol. iii, p. 32.

The risk of operating in such cases with cutting instruments in the interspace between the bladder and rectum without wounding either, as in DeHaen's case, was referred to by Bernutz by way of warning against the employment of the knife in those cases, instead of using the finger, as in the case related by Amussat. "The difference," he says, "in the relative mortality of these two proceedings has induced me to separate cases of congenital absence of the vagina, requiring the process of separating the parts by means of the finger, from other cases of fibrous obliteration, congenital or acquired, in early life, for which the knife alone must be resorted to, although it is always under circumstances of extreme danger."

It should, moreover, be observed that in several instances in which no operation was attempted death had resulted from rupture of the distended Fallopian tubes, or of the uterus itself, and consequent extra-peritoneal extravasation, leading to fatal peritonitis or septicemia. Thus, in the following instance:

R. S. M——, aged 18 years, was *in articulo mortis* when first seen by Dr. Munck, February 24th. For 18 months she had suffered symptoms indicating the accession of menstruation, but without any results; these symptoms recurred periodically with increasing severity. After nine months a tumor appeared in the abdomen; it was very tender on pressure. On February 20th she felt something give way, and the abdominal tumor disappeared. Severe pain followed, attended by a good deal of febrile disturbance; a blister was applied and a saline aperient administered; but she died in three days. *Post-mortem examination:*—On opening the abdomen, twelve or fourteen ounces of thick, reddish fluid was seen; the peritoneum was highly congested, and traces of lymph were evident. The uterus was large but soft, and contained four or five ounces of fluid like that in the abdomen. The Fallopian tubes were enormously distended, the free extremity of the right being closed, and a rupture of about three lines in extent was seen, forming a free communication between the uterus and the cavity of the peritoneum through which the fluid had escaped. The vagina was closed by a firm cartilaginous membrane.[1]

Another similar case was subsequently reported by Dr. Gosselin, who (*Gaz. des Hôpitaux*, 1867) relates a case of absence of vagina, with retention of menstrual blood; an artificial vagina was made, and a large quantity of fluid evacuated. The patient died on the fifth day. A large quantity of chocolate-colored fluid was found in the abdomen, and recent peritonitis. A tube had ruptured, giving exit to fluid into the abdomen.

Cases such as these that have now been referred to, whether original or quoted, are, I think, well deserving of consideration in illustration of two points of great practical interest. The first is the importance of any early diagnosis in such cases so as to anticipate and prevent the occurrence of hematometra to any extent that might lead to the rupture of the distended uterus or tubes. The second is the paramount necessity in all instances of operative interference of this kind to secure the permanent patency of a sufficient passage for the free external escape of the menstrual fluid, and thus obviate its possible intra-peritoneal extravasation through the Fallopian tubes.

In the formation of an artificial vaginal passage, it requires considerable caution, as already observed, whilst dissecting our way through the cellular tissue between the rectum and bladder to avoid injuring one or other of these parts. Nor is it by any means always easy to then either strike the cervical portion of the distended and globular uterus, or subsequently to maintain the permanency of the new canal. Bearing in view the occasional absence or imperfect development of the uterus and its appendages in cases of congenital deficiency of the vagina, as well as the risks of its attempted artificial formation by operation, it is hardly necessary to add that this should never be resorted to without previous evidence from physical examination of the existence of those organs, nor without the occurrence of symptoms of impeded or retained menstruation.

The pros and cons with regard to operative interference in these cases have been tersely put by Dr. Graily Hewitt: "There are," he says, "two classes of cases to be dealt with. (1) Those in which the absence of the vagina is accompanied with signs of menstrual retention; and (2) Those in which no signs of menstrual retention are present. This division is a practical one, for in the first class of cases operative measures are generally called for, while in the second this is not usually, or at all events necessarily, the case."[1]

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[1] Munck. London Medical Gazette, Vol. xxvii, p. 867, and Bernutz, op. cit.

In the former, by a properly conducted recto-vesical examination, the introduction of the sound in the latter, and of the finger in the former, we may readily, I think, ascertain the extent of the vaginal malformation or imperfection; whilst the condition of the uterus and its appendages can in like manner be exactly mapped out under chloroform by a conjoint recto-abdominal bimanual exploration. The result of this will be further elucidated by the history of the case, the occurrence of menstrual molimena, and in the development of the external sexual apparatus and mammæ. If these all point to existence of hematometra, dependent on non-development or obliteration of the vaginal passage, then there can be no question as to the imperative necessity of operative interference. The mere existence, however, of the womb itself is not *per se*, in my mind, sufficient reason for operative intervention in any case of congenital absence of the vagina, unless, as previously observed, we have in addition, evidence of the menstrual secretion, and of its consequent retention in the uterine cavity, where, by the impatency of its natural channel of exit, it is pent up and imprisoned, giving rise to the train of symptoms consequent on hematometra. In no other case, in my opinion, should the formation of an artificial vagina be ever attempted. On that point I differ from Dr. Edis, who says: "Where the vagina is congenitally absent, and so interferes with the process of menstruation, coition, or parturition, it will be requisite to resort to operative interference to make a passage and to maintain this in a state of patency "[2]

In the foregoing observations I have not attempted to consider the subject of acquired vaginal atresia or obliteration of the passage as a result of injury or disease. Having already sufficiently discussed these conditions in a former communication, I shall merely add that these obstructions are of much more common occurrence than is generally thought, and that my experience is entirely in accordance with Spielberg's,[3] that they most frequently result from previous puerperal endocolpitis. Neither have I here referred to those probably more frequent cases of partial obliteration, cicatricial occlusion, or atresia of the vagina that occasionally come before us in gynecological practice, and of which, in the course of a quarter of a century's experience, I have met with some ten or twelve well-marked instances. In one of these, when I was consulted, this condition had led to the inception of proceedings for a decree of nullity of marriage; but, as in all other instances of the kind that have come under my observation, this cause of marital trouble proved amenable to treatment by gradual dilatation.

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[1] Graily Hewitt, Diseases of Women, 3d Ed., p. 681. London: 1882.

[2] Edis, Diseases of Women, p. 397. London: 1882.

[3] Spielberg's Text-book of Midwifery. Translated by Hurry. Vol. ii. p. 138. London: 1888.

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A CASE OF NASO-PHARYNGEAL POLYPUS REMOVED BY TRÉLAT'S METHOD.

By David Wooster, M. D., San Francisco, Cal.

The following case is of interest, as showing the result of this operation in an extreme case and under unfavorable circumstances. It will, of course, be premised that this procedure is inadmissible, if the polypus can be removed by the natural openings.

The operation consists in: (*a*) Making an incision down to the bone, beginning, say, at the upper edge of the right wing of the nose, at the point where it becomes continuous with the cheek, carrying this incision up to the highest point of the naso-frontal depression, and then down on the left side to the posterior upper point of the left wing of the nose. (*b*) With a fine straight saw, the bones are now cut through in the line of the incision; any fragment remaining is divided with a chisel or cutting pliers. (*c*) The nose being now freed, is turned down on the chin, and left in charge of a skilful assistant, and kept covered with a piece of chamois, moistened with hot water, at a temperature of 105° F. The polypus is now exposed, and with the aid of scissors, curettes, forceps, etc., is rapidly, but carefully removed. (*d*) The nose is replaced, and sutured in position with great care.

My patient was a man, aged 68 years. A large tumor in the nares completely obliterated them, and pushed out the articulation of the nasal and superior maxillary of the right side, so as to sadly deform the face. There was a continual dripping of purulent, watery secretion from the nares, and overflowing of tears, so that the eyes were constantly red and watery. He breathed with his mouth open, and had a persistent hacking cough, due to the efforts to clear the throat of the posterior dripping from the polypus.

The operation having been determined upon, chloroform was administered, but in less than three minutes his heart stopped. He was resuscitated by immediately lowering the head, until the body was nearly perpendicular. The operation was then postponed until the following day, when ether was tried. The heart stopped again directly after the commencement of administration. Anesthetics were now abandoned, and the operation, lasting 1¾ hours, was completed, an occasional swallow of whiskey being the only agent employed. The polypus, which was exposed without difficulty, was multi-lobular, muco-fibroid, and extended in all directions. Processes of condensed mucous membrane hung from the ethmoid sinuses, and a fibroid lobule, the size of an almond, extended into the right antrum of Highmore. After everything had been removed, the remaining portion of the turbinated bones and the vomer were restored to their places as nearly as possible, the whole cavity was freely irrigated with hot water, and the nose raised and stitched in its place. The nose was kept wet with compresses, taken from water at 105° F. (regulated by thermometer) for 24 hours, without intermission, the compresses being changed every five minutes.

There were at no time any unpleasant symptoms; the temperature never rose above 102° F. At the expiration of six weeks, the patient left for his home in Nebraska. The linear cicatrix was scarcely apparent under his spectacles. I heard from him about one year after the operation. His health was good, there had been no return of the growth, and the nasal passages were free. He could breathe with his mouth shut, and could sleep in any position.

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THE INHALATION OF FOREIGN SUBSTANCES AS A CAUSE OF PULMONARY DISEASE.

By C. E. Fowler, M. D.

Read before the Sacramento Society for Medical Improvement.

Under the generic name of pneumonokoniosis, as proposed by Zenker, are included all those diseases produced by the inhalation of dust-like particles as coal, iron, stone, grain, etc. He applies to the disease produced by the first, the term anthracosis, to the second lederosis, and to the third chalicosis, etc.

That the presence of these substances in any large quantities results in various forms of pneumonitis and frequently in phthisis, is well known. A visit to the pathological laboratories of any of our well appointed medical institutions will reveal many specimens of this character. The State of Pennsylvania especially, which abounds in coal fields and numbers its miners by the thousands, produces a large proportion of cases of this kind. I have seen specimens in which one-half of a lung was almost black, and which, when cut, would impart a peculiar gritting sensation. Others would have small hard nodules scattered here and there throughout the organ, varying apparently according to the length of time the individual had been employed in the mines. Here also was an example of the power of the lungs to overcome adverse conditions, for some of these cases had died from intercurrent affections.

Dr. Kunze, in his thesis for the M. D. degree of the University of Kiel, publishes, as a contribution to the diseases caused by the inhalation of dust, a series of examinations of lungs so affected. He found that the dust being arrested in its progress caused inflammation, producing hyperplasia of connective tissue, especially where a dense network of lymphatic vessels exists. He also states that the degree of alterations in so-called dust lungs, depends not merely on the quantity of the dust inhaled, but on its greater or less morphological power of injuring the tissues. Thus he states that the least injurious substance when inhaled is lampblack, the particles being exceedingly fine, while the most injurious was dust inhaled by workmen in earthenware, and stone masons. In these latter, induration and tuberculous disintegration were frequently found. In workers in oxides of iron, the lungs were full of small granules and the morbid changes in the tissues were considerable. The lungs of gold miners were generally indurated and atrophied. Sand produced numerous circumscribed hard nodules and thick indurations. In cloth manufacturers, the lungs, in spite of their contact with an enormous quantity of organic dust, presented but few indurations. He concludes, from his experiments, that even the greatest alterations in the lungs, such as nodes, indurations and vomicæ, are mainly produced by the inhaled dust, and that tuberculosis is but an occasional coincidence.

Flint, in writing on catarrhal pneumonia, makes special mention of the inhalation of grain dust as a cause of this disease among the workmen employed in the removal of grain from vessels to cars and canal boats. In Buffalo this affection is called "elevator pneumonia," and the average length of life of those constantly employed in this work is stated to be five years. Much attention has been paid, in the last few years, to the subject of cigarette smoking as a cause of pulmonary disease. It was stated in a recent article that the sale of cigarettes was increasing to a remarkable degree every year, and that the habit was fastening itself upon the youth of the land to an extent not at all compatible with healthfulness and vigor. In some localities this fact has been recognized and laws have been passed prohibiting the sale of these articles to persons under a certain age. These laws should be general instead of local, and they should be enforced. Any vice that threatens the health of the youth of our land should be promptly and effectually crushed at whatever cost.

In various sections of California, and in fact in all mining districts, there is a class of pulmonary disorders brought on by inhaling the fumes of blasting powder. It is more frequently seen in workmen employed in gravel mines. In these mines nearly all of the gravel that goes to the mills is gotten out by means of giant powder, hence it follows that men working in them are compelled to inhale air laden with its fumes during the majority of the working hours. Among the miners the disease is known as "giant powder cough," and its symptoms and course are, I presume, similar to the "elevator pneumonia" described by Flint. The miners, however, do not succumb to the disease as soon as the grain handlers, owing perhaps to the fact that their hours of labor are shorter and the surroundings are more conducive to health, some men working for years without apparently suffering any great inconvenience.

The symptoms of this disease are as follows: On going into the mine in the morning the subject feels no particular inconvenience beyond that experienced by any one entering a somewhat close compartment, but on coming out at noon or night into the open air, he suffers from dyspnea, headache, vertigo and sometimes nausea. By lying down for a short time and keeping perfectly quiet, these disagreeable symptoms leave him and he feels as well as ever. After an uncertain length of time a cough makes its appearance, which increases in severity until usually the individual is compelled to cease work and seek medical advice.

The first case that came under my observation was that of a man about 50 years of age, an Englishman by birth, and possessing a more than usually robust physique. When I first saw him he was suffering from dyspnea; he had been coughing some six or eight months, and was then expectorating a dark colored substance somewhat similar to that in pneumonia. Physical examination showed no perceptible dulness at that time, but loud rales, indicating obstruction to the ingress of air. Later on, however, cavities formed, and in spite of treatment he died ten months after admission to the hospital.

The next case came to me about two months ago. He stated that he had worked for some time in the mines at Forest Hill, but had been compelled to quit on account of the smoke. His physical condition was similar to that of the first case, except there was more dulness over the left lung. I diagnosed incipient phthisis and placed him on appropriate treatment, advising a full diet, especially rare meats, and a small amount of alcohol. At the expiration of two weeks he reported himself better in every way, whereas before he coughed for four or five hours every night; he now coughed but one hour, and then only in the day-time. I have seen him once since and he was still improving, and while this improvement may be but temporary, there are some hopes of a permanent recovery in this particular case.

As to the way in which giant powder acts as an irritant to the pulmonary tissues, whether the inflammation is due to the mere presence of the fumes, or to some substance resulting from the combustion of the powder, or to both, I am unable to state. There is one point that I desire to call attention to in connection with this subject in general. In cases of phthisis arising from inhaling foreign substances, would we not be more justified in looking to the *bases* of the lungs for the seat of mischief, than to the *apices?* It would appear that foreign bodies, obeying the laws of gravity, would naturally seek the lowest point, which in this case would be the base of the lung, and in an unhealthy condition resulting therefrom, we have the necessary qualifications for the induction of that disease. Regarding the prophylaxis to be observed in relation to "giant powder cough," not much can be said. Perhaps in the invention of a smokeless powder, we may have an agent, the use of which will not be in any manner injurious.

S. E. cor. Second and K streets.

PROLONGED SURVIVAL AFTER AVULSION OF THE ENTIRE SCALP.

By F. B. SUTLIFF, M. D., Sacramento, Cal.

Professor Billroth, in a clinical lecture, reported in THE MEDICAL TIMES of February, alludes to the fact that in women the entire scalp may be torn off through the hair becoming entangled in machinery. The following case, illustrating an accident of this character in the male sex, may therefore be of interest.

In the fall of 1887, when practising at Maui, H. I., I was called to the village of Waikapu to see a Chinaman who had been caught by the cue in the rapidly revolving centrifugals of a sugar mill. I found him on all fours in a bunk in one of the plantation cabins, his head moving aimlessly about, looking as though he wore a scarlet night-cap. Upon close inspection I saw that the scalp had been torn from the entire head, breaking from the skin of the neck just at the hair margin. The forehead was almost denuded, one eyebrow being gone, and part of the other. There was a triangular flap on the right side, the base of which was about two inches broad. This reached up about three inches when held in place, but fell over the ear when released.

He was taken to the Malulani Hospital at Wailuku, the head was dressed antiseptically, morphine given to ease pain, and he was put to bed believing that he would need but little care, as I fully expected him to die before the morning. I was surprised to find him alive and fairly comfortable the next day, and more surprised to see him gaining strength as time went on. At the end of three or four days he showed signs of insanity, and we could not keep his hands away from his head. He pulled off the dressings and so disarranged the skin-grafts that we tried to start, that nothing came of them. The head became dry, and soon looked as though covered with parchment, which subsequently gave way in patches and peeled off together with scales of bone, leaving underneath granulations that tempted a further effort to start skin-grafts. Nothing came of them, however, and the patient's mental condition becoming worse, he was sent to Honolulu.

I saw nothing of him for nearly a year, when I was asked to go to Waikapu to see the same man. I was told that his friends, (?) not pleased with the fact that he was in an asylum, had brought him back to care for him. He became a burden to them, and to get rid of him they put him under an old evaporating pan, made of boiler iron, and left him in the sun to die. His cries brought assistance, and I found him in the cabin where I had seen him a year before. He was by this time blind, and a very disgusting sight to behold. The head was a mass of ulcerations, on which the flies had been at work for days. I again sent him to the hospital, where he was cared for by one of the sisters in charge, who brought him slowly out of his starved condition, taking pride and pleasure in the task.

When I left the island he was still in the hospital, the head, though sore, was slowly improving, and where it had healed looked as if covered with rawhide. His mind was almost gone and he had to be tended like a little child. I have tried to trace his history since then, but have not been able to do so—save that he was living at Honolulu early in 1889. I think he must since have died. The interest of the case centres in the fact that he lived for so long a time after such an extensive injury.

212 J street.

MEMORANDA.

Fracture of Clavicle, due to Muscular Action.

F. D——, native of Germany, æt. 49 years, came to me on the 27th of October, 1889, on account of slight pains and loss of power in the right shoulder. He stated that about three weeks prior, while lifting a heavy weight, he felt something give way in the right clavicular region. For some days previous to the injury, he had been annoyed by pain in the right arm and shoulder, but ascribed his trouble to rheumatism. The sensation experienced at the time of the accident, and for the few succeeding moments, he described as a pain, and twitching or jerking, extending along the affected part. Patient refrained from work for a few days, but sought no advice concerning his trouble. Upon returning to his labor, which is that of a miner, he noticed only slight pain, with a considerable weakness of that arm. Examination showed a large node or deposit of callus, the most prominent portion of which was about 2¼ inches from the centre of the supra-sternal notch. The sterno-clavicular articulation remained intact, and the proximal extremity of the clavicle could be traced outward, to the margin of the prominence, about three-quarters of an inch. The protuberance was equal in size to a half walnut, and the distal fragment of the clavicle was displaced slightly forward. Sliding of the fragments, with soft crepitation, was plainly marked, upon moving the arm, and was appreciable to the patient. By grasping the fragments of the bone with the fingers, movements at the point of separation could readily be produced. The man felt so little inconvenience from his injury that he desired no treatment. Upon the 16th of January last, the condition of the part was found to be practically the same, save, perhaps, a slight diminution in size of the prominence. A pseudo-arthrosis was evidently present, and slight crepitation was still noticeable. Patient pursues his usual vocation, and notices no other inconvenience than diminished power in the right arm. Inquiry reveals nothing of importance in patient's history, save an attack of great debility and emaciation after exposure to mercurial vapors. This illness occurred about 12 years ago, and the symptoms are but vaguely remembered. He denies syphilitic infection.

A. B. McKee, M. D.

Tuscarora, Nev.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal.

Oxytoxic Action of Quinine.—Concluding a paper on this subject, DR. ATKINSON submits the following propositions: (1) The cinchona preparations have not a fixed and definite influence in causing contractions of the uterus. (2) An oxytoxic action is occasionally produced by these remedies. This action depends on idiosyncrasy, and, as in other idiosyncratic reactions to cinchona, can be foretold in any given subject. (3) There is some evidence that this action is manifested only under large doses or in debilitated subjects. (4) Cinchona and its derivative should be employed during pregnancy with great circumspection and should be withheld at once on the supervention of symptoms indicating a uterine-motor influence.—*American Journal of Medical Sciences*, February, 1890.

Removal of the Uterine Appendages; Its Indications and Limitations.—DR. E. E. MONTGOMERY reaches the following conclusions: (1) Removal of the appendages should be promptly done in every case in which it is evident that relief can not be otherwise secured. (2) It should be held as a last resort when there is a hopeful prospect of restoration to health by less dangerous methods or without the sacrifice of the reproductive function. (3) Its consideration should be dismissed in every case capable of restoration to health by other plans of treatment.—*Journal American Medical Association*, February 1, 1890.

A Subjective Sensation of the Mouth in Women.—DR. HADDEN reports four cases of perverted innervation, characterized by intolerable burning of the tongue, extending sometimes to the lips and roof of the mouth. In two cases the sensation was especially severe at night and also, whenever the patients lay down, even during the day. One of the patients had a small epulis of the upper jaw and another enlarged papillæ of the tongue. Disregarding the woman with the epulis whom he saw only once, the other patients were nervous and excitable and flushed easily. The affection is no doubt functional and forms a well-defined group in the large class of subjective sensations in women.—*Lancet*, January 25, 1890. [Apart from the questions whether women are any more liable than men to "subjective sensations," and whether, in fact, all sensations are not really "subjective," I am sure that this condition should not be classed among the diseases of women, for the only cases that have fallen under my observation were in the persons of two lords of creation. In one of these cases the burning was described as "terrible." During the paroxysms the patient called for ice water, ice, anything to cool his burning mouth, and with his hands to his face, dashed up and down the room like a madman in a frenzy. Unfortunately, I saw this patient but once, and heard nothing of him afterward. The other case was milder, but still severe, and with the exception of the markedly burning character of the pain, possessed all the features of neuralgia. I have now under observation a case of facial neuralgia in a woman, in which the painful paroxysm is followed by severe burning—a sensation, it would seem, not at all rare in cases of this kind in either sex.—W. A. B.]

Infantile Mortality; Its Causation and Restriction.—DR VAUGHAN presents the following conclusions: (1) One-fourth of the children born in the United States die before they reach the end of the fifth year. (2) Derangements of digestion cause more than 50 per cent. of these deaths. This class of diseases may be restricted by proper attention to the food. (3) Infectious diseases are serious in their effects on infantile mortality. They may be restricted by isolating the sick and disinfecting clothing and rooms. (4) About three-eighths of the total deaths from pneumonia occur among those under 5 years of age. Proper clothing and lessened exposure to extremes of temperature will do much to protect against this disease.—*Journal American Medical Association*, February 8, 1890.

Antiseptic Tamponade of the Uterus After Labor.—DR. BLANC advises the use of the uterine tampon where *post-partum* hemorrhage does not yield to the means ordinarily employed. Sometimes the hemorrhage arises from a tear either of the cervix or of the vagina when a few sutures will suffice to arrest it. But if no laceration be found we should have recourse to: (1) Antiseptic injection at a temperature of 50° C. (122° F.). (2) Ergot. (3) Compression of the uterus through the abdominal walls. (4) Introduction of the hand into the uterus. (5) Compression of the aorta. If these means fail the uterus should be carefully washed out with an antiseptic solution, a Sims' speculum introduced, the cervix fixed with a volsellum and the uterus well filled (and afterwards the vagina moderately) with iodoform gauze.—*Gazette des Hôpitaux*, January 14, 1890.

The Value of Sodium Salicylate in Dysmenorrhea.—DR. EDWARD REYNOLDS summarizes the results of the use of this remedy in fifteen cases of dysmenorrhea, as follows: Of these cases, two should be excluded because the relief obtained may be, in part, ascribed to general improvement due to other treatment. Of the remaining thirteen cases, nine were completely, and two partially, relieved, while in two the treatment was without effect. In two of the cases (one normal, one of salpingitis) the omission of the salicylate was followed by a return of the pain, and at the next catamenia its resumption resulted in a painless flow. "The gratification expressed by the patients has been so great, and we ourselves have been so much satisfied with the use of the drug, that we have ventured to report this small series of cases, in the hope of provoking further observation of its value, and especially of the best method of administration. It was given in all our cases in 10 grain doses, t. i. d., for the week which preceded the catamenia, and continued until the time when the pain usually disappeared; but it is an open question whether the same or larger doses, given during a shorter time, might not have been equally or more effective. We are unable to judge whether any permanent benefit resulted; and we wish to say that we ourselves consider this report as a mere preliminary to further observation, which, with a larger number of cases, may, of course, largely alter the proportion of relief obtained."—*Boston Medical and Surgical Journal.*

Rapid Dilatation of the Uterine Canal for Dysmenorrhea and Sterility.—DR. TOWNSEND reports the following results in ninety cases: In virgins, other means failing, 57 cases of dysmenorrhea: completely cured, 53; not improved, 3; made worse, 1. In married women, other means failing, 33 cases of dysmenorrhea and sterility: completely cured of dysmenorrhea, 33; cured of sterility, 27; remaining sterile two years after operation, 6. It would seem utterly futile, and even dangerous, to operate in cases complicated with pelvic peritonitis, pelvic cellulitis or salpingitis. Endometritis and metritis, even with retro or ante-flexion, are not of themselves necessary barriers to the operation. Failure will be likely to follow an incomplete operation. Mere rapid dilatation of the uterine canal is insufficient. Patency of the canal must be afterwards maintained by a stem pessary, which, in addition, relieves existing flexion. The steps in the preparation of the patient, and in the operation itself, are as follows: (1) The operation, if possible, is to be performed one week after menstruation; thus giving sufficient time for healing of the lacerated tissues before the next flow, and giving opportunity for use of the stem to prevent serious narrowing of the canal. (2) The rectum being thoroughly unloaded by enemata, the bladder emptied, and the vagina irrigated with a warm, clean solution of bichloride of mercury, 1:5000, the patient is ready for the operation. (3) All instruments used are to be thoroughly cleaned and laid in a pan containing warm bichloride solution, 1:5000. The instruments necessary are, Sims' speculum, double or single tenaculum forceps, Ellinger's uterine dilators, corrugated ends, large and small sizes, as modified by Goodell, stem pessaries of plain vulcanite, or Thomas' galvanic stem pessaries, none to be larger than 1½ inches, sponge holders and small sponges, tampons of prepared cotton or wool, soaked in a 30 per cent. solution of boro-glyceride. (4) After the patient is thoroughly anesthetized, placed in Sims' position, and the speculum introduced and held by an assistant, the operator seizes the anterior cervical lip with the tenaculum forceps, and gently draws down the uterus to near the vulvar orifice. This procedure tends to straighten the uterine canal for the introduction of the small dilator; which, when introduced beyond the external os, is slowly opened, until it is thought that sufficient dilatation has been reached for the introduction of the large Ellinger, whose blades should then be separated to the extent of an inch at least, as marked on the scale placed near the handle, this being accomplished more or less gradually, and not by rude, quick measures. The stem is introduced, the tenaculum and speculum are then removed and the vagina tamponed, as well as a rectal suppository introduced, consisting of opium 1½ grains, belladonna extract ½ grain, and hyoscyamus extract 1 grain. (5) Should pain supervene, as is the case very frequently, especially over the hypogastrium, a flaxseed poultice, with tincture of opium is to be applied. The urine is to be drawn, if necessary, for a day or two. Usually, in a week's time the patient is able to be out of bed; and, provided no pain is occasioned by the presence of the stem pessary, it is to be left until just before the next menstrual flow, when it is to be removed, and after its cessation to be reinserted.—*Albany Medical Annals*, December, 1889.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital
Sacramento, Cal., and
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal.

Excision of the Head of the Femur and Erasion of the Hip-Joint With Immediate and Permanent Closure of the Wound.—At a recent meeting of the Clinical Society of London, MR. LOCKWOOD showed a boy, aged six years, upon whom he had performed excision of the head of the femur with erasion of the hip-joint with immediate and permanent closure of the wound. The operation was performed during a comparatively early stage of suppurative synovitis of the hip-joint, and upon a patient who had been treated for three months with rest and extension, followed by a relapse. There was half an inch of real shortening. The hip-joint was opened by the anterior incision, and a quantity of turbid fluid evacuated. The head of the femur was found partly displaced from the acetabulum. The head of the bone was removed. The acetabulum was erased with a sharp spoon, irrigated with a sublimate lotion, rubbed with iodoform and closed with sterilized silk sutures. An alembroth dressing was applied and pressure made with a rubber bandage. The wound healed in eighteen days with no unfavorable symptoms. Patient had a freely movable hip-joint and walked with ease. There was no more than half an inch shortening. The result was attributed to the early date of the operation, to the use of the anterior incision, and to the fact that the operation was aseptic. Tubercle bacilli were looked for, but not found. Although Mr. Lockwood considered excisions of joints by no means to be commended, yet in the present case he was in favor of early aseptic operation in suppurating synovitis of the hip.—*British Medical Journal.*

Surgical Canons.—MR. JONATHAN HUTCHINSON in his *Archives of Surgery* for October, 1889, says "The present surgical canon is to save the limb in all cases of compound dislocation or compound fracture into joints, except they be attended by exceptional complications." Referring to the two plans of treatment at present in use, with this object, the antiseptic, and the other, by which the systematic use of cold aims at preventing inflammation, the antiphlogistic plan. He says: "My own experience, both in hospital and in private practice, has led me to prefer, as being more certain in its results, a modification of what may be called the antiphlogistic plan." He gives a case treated in this way, it being one of compound dislocation of the rest of the tarsus from the astragalus, with a large laceration on the inner side of the ankle. For two or three hours the astragalus, the under surface of which was completely extruded, had been exposed to the air. Having had the foot washed and the bones sponged with spirits of wine and water, under the influence of an anesthetic, the parts were put into place. The limb was then placed on a back splint and wrapped from the toes up, with strips of lint soaked in spirits of wine and lead lotion, the strength being one of spirit to three of water. Orders were given to keep the lint constantly wet and that if the slightest approach of warmth of the limb was noticed, more spirit was to be added to the lotion. The result was that the ankle never inflamed in the least; that the wound healed without secretion and that the patient was walking about at the end of six weeks. It is Mr. Hutchinson's belief that by sedulous night and day attention to keeping a part cold for a week, all risk may be avoided and the surgeon has the development of inflammation in an injured joint absolutely under his own control. This use of cold he considers the best for compound fractures also, although where there is much injury to soft parts it is necessary to use a little caution lest gangrene be induced.

The Surgical Treatment of Volvulus.—DR. SENN concludes an interesting article on this subject, as follows: (1) The predisposing causes of volvulus are either congenital or acquired, and consist of elongation of certain segments of the intestine, abnormal length of mesentery and adhesions. (2) Irregular distribution of intestinal contents and violent peristalsis are the most important exciting causes. (3) Volvulus is most frequently met at the sigmoid flexure and the lower portion of the ileum. (4) Secondary volvulus on the proximal side of other forms of intestinal obstruction, is not a rare occurrence; it is also frequently developed during an attack of peritonitis. (5) As a rule, the symptoms are more acute and intense if the volvulus is located above the ileo-cecal region. (6) Vomiting in cases of volvulus of the sigmoid flexure is not a constant symptom. (7) The most important physical sign of volvulus is a circumscribed area of tympanites, which corresponds to the location of the volvulus, but this sign is only of value before general tympanites has set in, and, therefore, enables the surgeon in many cases to make an early and positive diagnosis. (8) All cases of volvulus should be treated by laparotomy, if reposition cannot be accomplished by rectal insufflation of hydrogen gas. (9) Reposition should not be attempted without evisceration. (10) Evacuation of intestinal contents by a free incision should be practised in every case where general distention of the intestines is present. (11) Enterectomy becomes necessary if any considerable portion of the intestinal wall has become gangrenous. (12) Irreducible volvulus should be treated by establishing intestinal anastomosis with permanent exclusion of the seat of obstruction from the active fecal circulation. (13) Recurrence of volvulus can, and should be, guarded against by shortening the mesentery, by folding it upon itself parallel to the long axis of the bowel and suturing the apex of the fold to the root of the mesentery.—*Medical News*, Nov. 30, 1889.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Treatment of Tracheitis by Intratracheal Injections of Menthol.—DR. LUBERT-BARBON says that tracheitis rarely appears alone, but usually follows acute or chronic laryngitis or bronchitis, and continues after the other diseases have disappeared. It causes a painful sensation beneath the upper sternal region and an irritable cough. Laryngoscopic examination shows redness of the mucous lining with intense vascularity of the upper tracheal rings. As general medical treatment did not allay the symptoms, he tried local measures. He employs a 5 to 10 per cent. solution of menthol in oil; in cases of long standing a 20 per cent. solution; a Pravez syringe, with the laryngeal portion of the needle lengthened, is used to apply the solution. The tube is introduced by the aid of the laryngoscope, and the syringe emptied, during a deep inhalation, if possible. The injections are generally well borne, and after the first application the painful symptoms and the redness begin to lessen.—*Wein. med. Blätter—Centralblatt f. klin. Medicin.*

Treatment of Phlegmonous Pharyngitis.—DR HELBING in ten cases of phlegmonous pharyngitis found that rubbing into the skin of the neck beneath the angle of the jaw, three or four drops of croton oil had checked the process in a short time. He believed that were this treatment applied in the very beginning of the attack it would bring the disease to an end within a few hours.—*Centralblatt f. Chirurgie*, January 11, 1890.

Foreign Body in the Larynx.—DR. FREIDENSOHN reports a case in which the patient had, three weeks previously, swallowed some hard substance, since when there had been increasing difficulty in breathing and swallowing; during the last few days the difficulty in breathing had greatly increased. A laryngoscopic examination revealed much hyperemia and swelling of the glottis, and a white foreign body lying in the rima. The anterior portion reached to the vocal cord, while the other extremity extended into the glottis. Under cocain anesthesia it was readily removed. It was a three-cornered piece of bone, one angle of which lay in the rima glottidis, while another extended into the larynx. —*Centralblatt f. Chirurgie*, January 18, 1890.

Treatment of Empyema of the Antrum of Highmore.—DR. FELIX SEMON says that, up to the beginning of 1886, three methods were followed: (1) Simple drainage through the natural opening. (2) Opening of the antrum through an alveolus (Cooper's method). (3) Opening through the fossa canina (method of Desault, Küster). In 1886, almost simultaneously with Ziem's first publication, Mikulicz recommended opening the antrum through the lower meatus with a specially constructed stiletto, and shortly afterwards Krause introduced, instead of the latter, a trocar. Of these four methods, drainage through the natural opening has found but few adherents, and has given not very encouraging results. The method, by opening from the fossa canina, has met with but little favor, though Christopher Heath and Morton Small have had good results with it; whilst quite recently Schech has stated that, especially in very obstinate cases, which resisted all other forms of treatment, he had finally obtained a cure by drilling a comparatively large opening through the fossa canina into the antrum, and plugging the cavity with iodoform gauze. The discussion has, however, been principally between the method of opening the antrum through an alveolus and that of opening it from the lower meatus. The adherents of the former claim for it. (1) That in many cases, in order to get rid of the *fons et origo mali*, the extraction of one or several carious teeth is *ipso facto* necessary, and it is therefore natural that the simple act of perforating through the alveolus should at once be added to the removal. (2) That the opening thus produced corresponds to the most *dependent* part of the cavity, and that the drainage, therefore, will be most perfect. (3) That the patient can carry out the after-treatment himself. The objections are stated as follows: (1) That a healthy tooth often has to be drawn. (2) That the constant running of pus into the mouth was a source of great annoyance to the patient. (3) That by creating and keeping open a communication between the antrum and the mouth, the entrance of particles of food and pathogenic microörganisms of the oral cavity into the antrum was facilitated. Dr. Semon thinks that experience does not support the arguments against this method and that the results of opening into the nose are not more satisfactory. His cases in which he has operated through the alveolus have been satisfactory. Sometimes the after-treatment has been longer than one could wish. In the future, in obstinate cases, he will establish a large opening above the canine tooth and pack the cavity with iodoform gauze, or make an additional opening in the lower meatus of the nose.—*Medical Press and Circular*, January 15, 1890.

SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

AND

DERMATOLOGY.

By D. W. MONTGOMERY, M. D., Professor of Pathology, University of California, San Francisco.

. **Syphilitic Alopecia.**—Although the falling out of hair from syphilis is only temporary, and in a short time recovers spontaneously, still it is a very noticeable symptom, and consequently embarassing to the patient. Any treatment tending to shorten its duration or to mitigate its course would be desirable. BESNIER recommends the following: As a preliminary, the hair ought to be cut very short, and in the morning, after washing the head well with soap and cold water, apply the following ointment: Salicylic acid, 2 parts; precipitated sulphur, 10 parts; lanolin; vaseline, aa, 50 parts. At night with a soft brush rub the head with: Alcohol, scented with rosemary, 100 parts; tincture of cantharides, 10 parts. If the hair is naturally very oily, this may be remedied by using a powder composed of salicylic acid one part, and powdered starch, 100 parts. With women, who are naturally averse to having their hair cut, the good effects of this treatment are much less manifest.—*Gazette des Hôpitaux*, August 27, 1889.

Cerebral Syphilis and General Paralysis.—DR. L. REGNIER, after a series of observations, which are published in the *Révue de Médicine*, concludes that syphilis cannot be considered as a direct, predisposing or occasional cause of progressive general paralysis. The same occasional causes may produce paralytic dementia in subjects free from syphilis, and may set up symptoms in patients who bave had syphilis. It is specificity which creates the difference between the two diseases. The anatomical lesions are different, and when found together in the same case are clearly independent of each other. The two diseases, as a rule, run an entirely different course. The principal and essential distinction, in respect to prognosis, is the curability of the one and the hopelessness of the other. —*British Medical Jonrnal*, January 11, 1890.

Salicylate of Mercury in Syphilis.—The mixture used in the Bonn Clinic consists of salicylate of mercury 1 part, liquid parafine 10. The early eruptions of syphilis disappear after one or two injections, which are given in doses of 1 gramme every three days. In later forms it exerts a favorable action; but one or two more injections are necessary than when calomel is used. Neither local inflammation nor mercurial intoxication are produced by its use, as may arise after other forms of this drug when given subcutaneously.—*Centralblatt f. klin. Medicin*, No. 1, 1890.

Sweat Cure of Syphilis.—RADESTOCK (*Therapeut. Monats.*) has obtained good results from this method. Immediately upon the first appearance of the chancre, warm baths at 30° R., lasting half an hour, are given weekly. If the inunction cure is pursued at the same time, the bath is given on the rest day, usually the seventh. After the bath, sweating is promoted by drinking warm teas, by the subcutaneous injection of pilocarpine, gm. ⅓, or the use of sweat ovens. The pilocarpine injection must be used but once, as it is desired only to produce a sweating. After disappearance of all syphilitic evidence, the sweat baths must be continued. He does not claim that this method alone will cure, but it is of value in connection with the specific treatment of the disease.—*St. Petersburger med. Wochenschrift*, No. 2, 1890.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

Chloralamid as a Hypnotic.—DR. W. HALE WHITE, of Guy's Hospital, London, has recently given chloralamid to twenty patients suffering from various diseases, in all of which insomnia was a prominent symptom. "The drug produced comfortable sleep in all of these but two. One of them was suffering from delirium connected with cerebral hemorrhage, and the other was admitted with rheumatic fever, complicated by delirium tremens and salicylic poisoning. It is noteworthy that some of the other patients were suffering from extremely painful diseases; and yet, chloralamid produced sleep. Thus, a woman who had a thoracic aneurism, preferred it to morphine; and another patient who had a carcinoma of the stomach, also slept better with chloralamid than with morphine. The house physicians and nurses, who see the patients frequently during the night, all tell me that those who take chloralamid sleep well and comfortably after it; and this agrees with my own experience and what the patients tell me. In none of the twenty patients to whom I have given it, and many of them have taken several doses, have any effects followed that can be looked upon as contra-indications to its use. Never have I observed any depressing results, nor has headache followed its use. As the drug is feebly soluble in water—twenty grains take five hours to dissolve, in two ounces of water—it is often given as a powder in milk. Now I always prescribe it with spirit; twenty grains will dissolve in one drachm of rectified spirit in fifteen minutes, and water may be added to this solution without re-precipitating the drug. A good way is to tell the patient to dissolve it in a little brandy, add water to his liking, and drink it shortly before going to bed. If given in milk, not only is it insoluble, but it is difficult to swallow, for it sticks to the sides and bottom of the glass. It should never be prescribed with alkalies, for they decompose it, as does also water at 148° F." The average dose for an adult is from 20 to 60 grains.—*British Medical Journal*, Dec. 14, 1890.

Popular Hypnotism.—[In reviewing a work on hypnotism for this Journal, I urged the necessity of some legislation for the purpose of preventing public hypnotic *séances*, and limiting this therapeutic method as absolutely as the sale of narcotics or any deadly poison. The following abstract of an article contained in the *Lancet*, December, 27, 1889, will show how urgently some decided steps are needed.—W. W. K.] A few days since, we noticed in the columns of a daily contemporary, a letter from a gentleman who affects to belong to the "London Hypnotic Society," vaunting the merits of the hypnotic treatment of dipsomania *inter alia.* We learn from this "representative of curative hypnotism in London," that the method is already in full swing, the Rev. Mr. Tooth claiming to have effected 80 per cent. of cures. This is rather startling intelligence for those who know what a demoralizing, and even dangerous, practice that of the indiscriminate induction of the hypnotic condition really is; and the idea that our parsons have taken to mesmerizing the members of their flocks, even for so praiseworthy a purpose as that of reclaiming them from a degrading habit and rescuing them from a drunkard's grave, to use the technical expressions, is really matter for very serious consideration. The question as to the propriety of permitting the unrestricted practice of hypnotism by irresponsible persons, ought to engage the attention of the profession, if only for the purpose of placing the authorities on their guard. We gather that this society numbers medical men among its adherents; a statement which, if true, is to be regretted.

Oil of Eucalyptus in Some Forms of Malaria.—Dr. J. H. Musser furnishes a very interesting article on the oil of eucalyptus in the treatment of malaria, to which he appends the following conclusions: (1) Intermittent malarial fever is a self-limited disease, and a large number of cases get well on removal from an infected locality. (2) The oil of eucalyptus is of no service in cases of intermitting fever, in the blood of which the organisms that are the possible cause of the malaria are found. (3) The so-called habit-chills, are relieved or checked by the use of the drug. (4) Malarial neuralgias, malarial headaches, and vague intermittent symptoms, even complete but mild paroxysms, independent of the presence of any local organic disease, but due to malarial intoxication, are relieved by eucalyptus. The proof that they are due to malarial intoxication has not thus far been found by an examination of the blood, it is fair to state, but only because of the residence in the malarial locality, and because others living in the same locality are affected with the disease. (5) After quinine has controlled the paroxysms of intermittent fever, and cleared the blood from organisms, eucalyptus will relieve or cure abortive paroxysms, intermittent neuralgias, or headaches; or those marked symptoms of malaise, prostration, loss of appetite, and feverishness that are often seen. (6) A dose of five drops, four times a day, preferably administered in capsule, is sufficient to produce the desired result.—*Medical News*, December 27, 1889.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

Creasote in the Treatment of Tuberculosis.—The following conclusions of DR. KOSSOW GERONAY, based on a study of 150 cases of tuberculosis, are worthy of recognition. The observations are accurate and impartial, and serve to fairly establish the remedial value of creasote in this affection: (1) By long continued use of creasote in tuberculosis, an improvement in the individual symptoms is noted in the majority of cases. In the incipient cases, the improvement is often permanent; and even in the most advanced cases, there is temporary amelioration. The following symptoms disappear or improve: Cough, expectoration, night sweats, cyanosis, dyspnea, etc. The appetite is benefited, and with it, nutrition and body weight. In many cases the fever is favorably influenced, or caused to disappear. Expectoration, formerly difficult, will become easy. (2) The lung process is without question, in the incipient cases, favorably influenced. An absolute disappearance of the bacilli from the sputum was not noted in any case. When hemoptysis was present no good effects resulted. In intestinal and peritoneal tuberculosis, creasote was useless. The best method of administration was with creasote capsules and creasote inhalations. The use of creasote, in order to be beneficial, must be continued for months. The following formula for inhalation is recommended: Creasote 2.0—3.0, Spirit. vini rectif. 10.0, Aq. destillat. 590.0.—*Wiener klin. Wochenschrift*,, November 14, 1889.

Early Diagnosis of Chronic Kidney Lesions.—DR. C. S. BOND presents the following synopsis as a result of certain investigations on this subject: Albumin in the urine probably means disease somewhere in the body. In so-called physiological quantities, it probably may be referred to disease removed from the kindeys, and is as transient as the cause. In pathological quantities, it signifies either inflammation external to the kidneys, or a lesion of these organs. Many patients do not pass albumin with evident kidney lesions. Albumin is inconstant, and bears no relation to the extent of the lesion; but when present must be respected as a pronounced factor in diagnosis. It generally makes its appearance a long time after other well marked symptoms have existed; and the disease is grave when it exists in pathological quantities, and should not, therefore, be waited for. Casts bear an intimate relation to albumin, but appear later. They are strong proof of renal inflammation, as they carry usually a part of the epithelium. Differential diagnosis of the varieties of kidney lesions can often be made from this fact; but casts, like albumin, are inconstant, many patients not passing them at all, and they always appear too late to be a factor in early diagnosis. The specific gravity of the urine is not to be relied upon unless the mean specific gravity of many specimens is taken of known quantities of urine for twenty-four hours. This would mean a small amount of urea passed within this time, since it is the dominant salt eliminated. Therefore, why not test for urea at once? Some outward manifestations of ill health always precede, for some time, the passing of albumin and casts. Urea is excreted in abnormally small quantities in cases of well marked kidney lesions. It is also so excreted in cases having the prominent physical symptoms without albumin and casts. Urea is excreted in small quantities months, and often years, before albumin and casts appear; and, therefore, a knowledge of this excretion is invaluable as a diagnostic sign of early lesions. The diminished quantity of urea eliminated is the result of the constitutional disturbances which precede, for long intervals of time, the local lesion.—*American Journal of Medical Sciences*, January, 1890.

Influenza.—At a recent meeting of the Berlin Medical Society, the epidemic of this disease was discussed. It was estimated that from 10 to 50 per cent. of the population was afflicted. The course of the disease during the epidemic did not differ from previous epidemics. The pandemic character of the affection was clearly manifested, no part of Europe having been exempt from invasion. This epidemic can be traced to St. Petersburg, but how and when it originated there, was not determined. The symptoms of influenza were contrasted with those of "dengue," and like the latter consisted of sudden fever, pain in the head, extremities and back, hyperemia of conjunctiva, coryza, extreme prostration and finally the favorable prognosis and termination by crisis. In Paris, leading authorities are not agreed whether to refer the symptoms present to dengue or influenza. Rest in bed, strict diet and antipyrine constitute the therapy.—*Berliner klin. Wochenschrift*, December 23, 1889.

During the recent epidemic of influenza in St. Petersburg, the following were observed: Duration of incubation, two days. The prodromal stadium was short, lasting but a few hours, and manifested by prostration, headache, chills, etc. The symptom complex varied, and three forms of the disease were distinguished. Common to the various forms are the general nervous symptoms, such as extreme prostration, pain in the head and extremities, vertigo, etc. The temperature rapidly rises, attaining its maximum elevation on the first day, then continuing for two days, when it suddenly falls. Duration of fever, usually one to three days, and rarely lasting five to six days. A slight enlargement of the spleen attends the affection. The nervous form of the disease is characterized by a group of symptoms emanating from the nervous system. This form in its incipiency has often been mistaken for typhoid fever. The second form is marked by catarrhal inflammation of the respiratory mucous membrane. The gastric variety is identified with catarrhal involvement of the digestive tract, and is attended with vomiting, lasting one or two days. Among the special symptoms observed were herpes labialis and nasalis, (frequently) erythema, roseola, urticaria, etc. Among the complications, though infrequent, were meningeal irritation, and catarrhal pneumonia. The latter was the cause of death in the few cases which terminated fatally. Many abortive cases of the disease were observed. The convalescence was influenced by the severity of the disease and the method of treatment. Many of the patients felt well after cessation of the fever, whereas others suffered for many days with nervous symptoms. Relapses were observed. The treatment in the majority of cases consisted in the administration of quinine, antifebrin, antipyrin, salicylate of soda, and in the promotion of diaphoresis.—*Muenchen. med. Wochenschrift*, December 17, 1889.

PROF. E. MAUREL presents a concise recapitulation of influenza, described by him as dengue fever. (1) Dengue fever shows itself in different forms in the various epidemics. Notwithstanding the different manifestations of the disease, there are a certain number of characteristic symptoms which enable us to distinguish this from other affections. (2) All forms of the disease are characterized by a febrile and contagious affection with various eruptions and attended by rheumatic symptoms (muscular and articular). (3) The disease is rich in synonyms, among which are the following: Rheumatic fever, dandy fever, trancazo (coup de barre), polka fever, knienbels (mal de genous), bouhon (Sandwich Islands), red fever, rheumatic scarlatina, date fever, Chinese fever, etc. (4) The different names have originated from the predominant symptoms in each epidemic. (5) Dengue must beconsidered as a contagious disease, although the contagium is unknown. (6) Examinations of the blood and other fluids for pathogenic microbes have been unsuccessful. (7) Dengue exists usually in epidemic form when it first invades a country, although later it is not rare to observe isolated cases. (8) For a long time it was supposed to be confined to hot countries exclusively, although of late, a departure from this rule is not rare. Until 1867, it had only twice made its appearance in Europe. (9) Dengue does not produce immunity against itself. One may be afflicted several times at short intervals. It does not protect the organism from any other disease, although eruptive fevers deminishing the receptivity of the organism for contracting dengue. (10) In its epidemic course, low countries are especially invaded. (11) It respects high altitudes. (12) It can develop itself in all seasons, but those most favorable to its development are hot and damp, such as winter in the West Indies. (13) Although no statistical evidence is at command, observation demonstrates that it is indifferent to race, sex, age and mode of living. (14) In certain epidemics the domestic animals have been affected, such as the dog, cat, sheep and horse. (15) The period of incubation is four days. This is important, considering the general preventive measures. (16) Its general symptomatology is not difficult to distinguish, consisting, as it does, of eruptive and muscular rheumatic fever. (17) Its general evolution is not less characteristic and consists of two periods. The first period: Sudden appearance, intense frontal cephalalgia, gastric irritability and severe prostration. On the second day, in connection with gastric symptoms, severe muscular pain in the lumbar region and extremities, together with an eruptive development. The red and congested face of the patient in certain epidemics has led to the designation, red fever. At other times the eruption is fugacious and involves only the trunk, which may be overlooked. This eruption is erythematous. The fever is somewhat intense, although rarely over 40° C. The pulse and respirations show the same characteristics as in other febrile affections. The respiratory organs, excepting the pituitary membrane, are rarely affected. This period has an average duration of 2 days. Then a general improvement is noticed, with evanescence of fever, pain and eruption. This period lasts 2 or 3 days. It is only after this amelioration that the second eruption appears. This eruption is less fugacious, although presenting itself in a varied character; terminating in desquamation with pruritis. It is not uncommon to observe that all the symptoms become aggravated on the appearance of the second eruption, although the exacerbations are of short duration, and improvement usually follows the complete development. (18) The urine rarely contains albumin. (19) Convalescence is usually protracted and disproportionate to the severity of the disease. (20) The complications are the same as those of eruptive fevers, although rarer and less dangerous. (21) Medication should not be active and the individual case, not the disease, should receive attention. Watch the case and avert complications. (22) Dengue must be classed among the eruptive fevers. It includes an initial rash and a secondary eruption, which is the true one, and determines the nature of the disease. (*a*) Like the eruptive fevers, it has a definite period of incubation. (*b*) It is the result of a human poison. (*c*) The gastro-enteric symptoms are not characteristic. In conclusion, he says that considering the symptoms of the present epidemic and its geographical distribution, it cannot be confounded; and that, unless it modifies itself, there is nothing to authorize us even to consider it as a form of dengue fever.—*Tribune Médicale*, January 2, 1890.

Tetany.—PROF. R. V. JUKSCH analyzes 41 cases of this affection, which have come under his personal observation. His experience agrees with the usually accepted opinion, that the disease attacks young persons between the ages of 15 and 30 years. One-fourth of his cases occurred among shoemakers, and he is inclined to believe, with many others, that it is a professional neurosis—at least certain occupations predispose to it. He also maintains that it is not always characterized by a definite symptomatology. On the contrary, its symptoms are often simulated by other affections. He distinguishes three forms of tetany. From careful temperature measurements, made every two hours, a clinical investigation which has been heretofore neglected in this disease, it was demonstrated in a number of cases (9 out of 35), that the affection began with elevation of temperature, and fever accompanied its course. These particular cases accumulated at definite periods of the year, notably in the month of March. It was also developed that the affected individuals were previously attacked. The course of the disease rarely extended beyond six days, when the patients were usually discharged as cured. He designates this form, acute recurrent tetany. The second group is distinguished from the acute form by diminished intensity of the symptoms, by a protracted course of many months' duration, and the absence of fever. This form usually follows extirpation of the thyroid gland and prolonged lactation. In a third group, cases are included where the symptoms of tetany are masked by some other affection. Thus, one case is cited where the symptoms indicated the existence of a brain tumor. In this case, the tetany was looked upon as a cerebral irritative phenomenon.—*Internationale klinische Rundschau*, December 22, 1889.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

The Surgical Treatment of General Paralysis.—DR. F. CLAYE SHAW reports a case presenting early symptoms of general paralysis, in which the operation of trephining was performed with the result that the prominent symptoms disappeared. The steady progress towards death which the disease makes, as a rule, renders it imperative to consider the feasibility of almost any remedial measure, however severe. Occasionally unexpected recoveries in cases of general paralysis are reported, but, without denying the correctness of these instances, it must be said that they are few in number, and so obscure as to the manner in which a cure is effected, that we must consider such results unlikely to happen. The operation was performed with the view of relieving the tension due to the pressure of fluid present and to irritative processes in the cortical structure, which pathological appearances generally indicate, and with the endeavor to set up a changed nutritive process. Dr. Ferrier agreed that the patient was rapidly approaching a condition of dementia of the paralytic form and recommended the operation proposed. The history of the case is as follows: W. H——, admitted November 14, 1888, in an excited, grandiose mental state, affection of speech, exaggerated reflexes, gait very unsteady and retention of urine. On the certificate of admission, his delusions were described as very "large," and there was no doubt that he was in an elevated and happy frame of mind, altogether incompatible with a realization of his true condition. It was probable that the man was suffering from a bulbar lesion, and that the mischief was extending to the superficial parts of the brain. From time to time he had convulsive attacks and short periods of loss of sensation, chiefly in the left extremities, deglutition and speech became more and more impaired, whilst his mental condition was fast approaching a well established dementia. July 28th the patient was trephined on the right side of the skull over the central sulcus and about two inches outside of the longitudinal fissure. The operation, performed by Mr. Harrison Cripps and Mr. Bruce Clarke, consisted of making two holes with a trephine, removing the intermediate bone so as to make an opening about 1½ in. long by ¾ in. wide, cutting away the dura mater and letting out a considerable quantity of subarachnoid fluid. Strict antiseptic precautions were taken, and the after-course of the operation was very satisfactory, the temperature at no time exceeding 99.5° F.; by the tenth day healing was complete, and the patient was able to sit out of bed. With the exception of a little tingling in the fingers of the left hand on August 7th and 15th, there have been no cerebral symptoms since the operation. The state of the patient 4 months after the operation shows a great improvement, particularly in his mental condition, and also as regards the bulbar symptoms. He swallows better and speaks more distinctly. The mental signs of exaltation have disappeared, he has not had any of the epileptiform attacks to which he was subject, he is free from headache and is able to hold his urine. DR. CLIFFORD ALBUTT, who had seen the patient shortly before the case was reported, agrees that the man could no longer be considered insane. Dr. Shaw believes that this is the first case reported where surgical measures have been introduced into the early treatment of general paralysis.—*British Medical Journal*, November 16, 1889. [It is, of course, too early yet to consider this case successful or to postulate from one operation, but if further experimenting should be attended with the same satisfactory results, surgical treatment in asylum practice has a great future before it.—A. W. H.]

Epilepsy, Chorea and the Eye Muscles.—A couple of years ago a commission was appointed by the New York Neurological Society to investigate the relation of insufficiency of the ocular muscles to chorea and epilepsy. This commission sent in their report in November last, which after an animated discussion was adopted. The commission consisted of Drs. E. C. Seguin, W. R. Birdsall, F. P. Foster, C. L. Dana, M. A. Starr, D. Webster and W. O. Moore. These gentlemen worked in coöperation with Dr. George F. Stevens for the purpose of testing the validity of the latter gentleman's statements that treatment of insufficiencies of the ocular muscles would cure a large percentage of cases of epilepsy and chorea. The investigation was made on the following plan: Having found a suitable case of idiopathic epilepsy or chronic chorea, the patient was examined separately by two of its neurologists and a full history taken. The patient was then seen by Dr. Stevens, and if acceptable to that gentleman, he would be sent to have his eyes examined again by two of the ophthalmologists of the commission. Each patient, therefore, went through four separate examinations before treatment was begun. Records were then kept of operations performed and of the progress of the case. Examination and treatment were in this manner carried out on twenty-eight patients, but for various reasons fourteen were withdrawn or not counted. The remaining fourteen cases were treated continuously for over four months, and in some instances over two years. Nine of these cases were of epilepsy; five of chronic chorea. Three of the cases of epilepsy and three of the cases of chorea were improved. None were entirely and completely cured, although two of the cases of chorea seem to have become practically well. None of the cases of epilepsy were cured or even very strikingly improved, though as to this latter point there seems to be some difference of opinion. The commission, in their conclusions, state that they cannot recommend a treatment of insufficiencies of the ocular muscles in cases of epilepsy and chorea as the sole therapeutic measure, or as a curative measure. It is evident that they do not attach much importance to oculo-muscular treatment, although they do not deny it all value. Ocular irritation may exaggerate or keep up a convulsive disorder, just as a tight prepuce or a disordered stomach may do it. The role which peripheral irritation plays in the etiology of these diseases is no doubt vastly exaggerated. Although Dr Stevens' claims seem extravagant, some words of justice are due him. By his persistence and ingenuity in following up his special line of work, attention has been drawn to a class of functional eye disturbances which had been very generally overlooked.—*Medical Record*, December 21, 1889.

A Case of Epileptic Psychosis.—DR. CHATELAN first recalls some well-known facts about psychoses following epilepsy, and then gives the detailed account of a legal case. It is instructive in so far as the patient, apparently, was the possessor of perfect intellectual health. A young man occupies himself with all the duties required of him, does office work, studies at a commercial college, and leads his daily life without exciting any surmise that he is not as he should be. Suddenly, without any provocation, he makes an attack upon a stranger, is arrested, and medical examination shows him to be effected with *petit mal.* Dr. Chatelan says in conclusion: Any unaccustomed criminal act, absurd in its ends or means, must, even if the person committing it is apparently in the most perfect health, be made the subject of a careful medical examination.—*Annales Médico-psychologiques.—Journal of Nervous and Mental Diseases,* December, 1889.

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 94 town districts of the State during the past month, in a population of 802,900, correspond to an annual rate of 20.64 a thousand, the total mortality having been 1,387. 83 deaths were due to zymotic diseases, giving an annual rate of 1.224 a thousand. Of these 28 were due to typhoid fever, 21 to diphtheria, 11 each to diarrhea and dysentery and cerebro-spinal fever, 7 to scarlet fever, 3 to cholera infantum, and 1 to whooping cough. 582 deaths resulted from diseases of the respiratory organs, giving an annual rate of 8.80 a thousand. Of these 270 were due to consumption, 228 to pneumonia, 57 to bronchitis, and 27 to pulmonary congestion; the rate being 4.03 and 3.40 for consumption and pneumonia respectively. 93 deaths resulted from diseases of the heart. The average annual death-rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 608,000, was 22.20. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from San Francisco, the lowest from San Diego.

Summary for 1889.—Although the past year has been characterized throughout the world as unparalleled in the history of civilization in the number of accidents, both by land and at sea, in the destruction of property by fire, and in the horrors resulting from floods, yet California, as well as the whole Pacific Coast, has been largely exempt from all such disastrous influences, and the year 1889 closed upon us with a greatly diminished death rate. In 1888, for example, in an average population of 720,408, reporting monthly to this journal and to the State Board of Health the average monthly mortality was 1,038; whereas for 1889 the average population reporting monthly was 771,993, amongst whom occurred an average monthly mortality of but 914. In 1888 the average mortality per month from all forms of diseases of the respiratory organs was 288, and from zymotic diseases 175, while for 1889 the record shows but 230 and 118 respectively for the same groups. For 1888 the annual mortality is shown to have been 17.04 per thousand, whereas for 1889 it was but

14.28½. The following table shows the number of persons, reporting monthly, and the number of deaths occurring from the two groups of diseases alluded to, viz: diseases of the respiratory organs and zymotic diseases, together with the monthly mortality during the year, and the annual average mortality:

Number reporting for 1888.		Whole number of Deaths	Deaths from Diseases of the Respiratory Organs.	From Zymotic Diseases.	Monthly Mortality.
January	754,950	1,169	344	190	18.58
February	608,800	1,053	320	187	20.75
March	747,800	1,307	417	275	20.97
April	751,200	1,108	384	172	17.68
May	722,750	1,098	348	157	16.92
June	736,550	1,048	313	141	17.09
July	727,450	1,038	285	146	17.11
August	711,100	968	248	156	16.33
September	712,500	960	206	198	16.16
October	731,100	914	206	152	15.00
November	707,700	884	173	162	14.98
December	733,000	908	215	164	14.86

Monthly average reporting, 720,408; average deaths per month, 1,038; from diseases of the respiratory organs, 288; from zymotic diseases, 175; annual average mortality, 17.04.

Number reporting for 1889.		Whole number of Deaths	Deaths from Diseases of the Respiratory Organs.	From Zymotic Diseases.	Monthly Mortality.
January	713,700	1,065	298	154	17.80
February	710,000	921	269	124	15.56
March	773,000	1,000	306	115	15.53
April	701,800	859	286	111	14.69
May	744,800	905	157	77	14.58
June	752,450	855	215	111	13.64
July	758,850	885	219	144	14.10
August	790,700	879	216	126	13.33
September	830,250	897	178	112	12.96
October	829,615	810	191	89	11.71
November	813,350	891	191	110	13.08
December	845,400	1,009	232	143	14.34

Monthly average reporting, 771,993; average deaths per month, 914¾; from diseases of the respiratory organs, 229⅚; from zymotic diseases, 118; annual average mortality, 14.28¾.

It will thus be observed that with an average monthly increase of 51.585 persons during 1889, the annual death rate per thousand was 2.75 less than for 1888. It will also be observed that a remarkable uniformity in the death rate was maintained throughout the year, excepting in January, when it rose to 17.80, and in November, when it fell to 11.71.

La Grippe.—The month of January was characterized by the prevalence of what, for want of a better name, has been termed La Grippe. Whether or not it is but a recurrence of the French La Grippe—the specific germ having lain hidden away in some obscure corner of Russia for a century or more—matters but little to a suffering public ; certain it is, however, that it has traveled with unprecedented rapidity, and that it has created, to say the least, much discomfort. It is even possible that an occasional death may properly have been attributed to it, yet the number of fatal cases must have been few indeed, None of our correspondents attribute a fatal issue to it in a single instance, nor has one occurred in this city so far as can be ascertained. That it may have predisposed certain individuals of feeble constitution, or those debilitated by previous disease to the development of acute pulmonary affections, is undoubtedly true ; but that because of its presence throughout California for the past month the death rate has been phenomenal is erroneous. The mortality from acute and chronic pulmonary affections occurring during the month was truly phenomenal, but when that term is applied to the gross monthly mortality of the State it is far from being correct. The statement of the Secretary of the State Board of Health that the death rate of 1.72 for the month or the annual rate of 20.64 "is the largest we have had for many years" is not borne out by the facts; and however pleasing it might be to the people of our fair State to regard a mortality of 20.64 as *phenomenal*, yet a strict regard for the truth compels its correction. Going no further back than the months of February and March of 1888 (as shown in the preceding table), it will be observed that the aggregate mortality of each of them exceeded that of January last. Any one desiring to trace the records back for a few years will doubtless find many months in which the mortality was even greater than for March, 1888; this, however, is both unnecessary and unprofitable, and is alluded to merely to correct an error to which publicity has inadvertently been given.

METEOROLOGY.

By J. W. ROBERTSON, B.A., M. D., San Francisco, Cal.

Summary for January.—*Temperature.*—While the average temperature for January has been below normal, it has not by any means reached the mark registered in January, 1888. Along the coast, and in the great valleys, mean temperatures ranging from 40° to 50° are reported; the sea coast stations being warmest, while those places lying near the snow-covered Sierras were decidedly cooler.

Rainfall.—The rainfall for January was heavy, and the number of days on which rain fell was remarkably large; in some localities being greater in number than the combined number of fair and cloudy days, thus showing the extremely unstable condition of the weather even on those days marked clear. There were only 6 days in the month in which no rain fell in any portion of California, while from certain stations 22 to 26 days were reported on which rain fell. The result was that in nearly all districts the rainfall for January over the normal rainfall for that month has been doubled.

California—Tabular Statement for December, 1889.

Stations.	Temperature.						Rainfall.		Mean Relative Humidity	Weather.			Wind.	Furnished by—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	40.8	59.0	26.0	----	----	----	----	8.97*	----	----	----	----	SE.	Southern Pacific Co.
Berkeley......... "	40.6	58.0	31.0	----	----	11.1	22	11.1	86.3	10	7	14	S.	Obs. Univ. of Cal.
Colfax........... "	36 0	53.0	20.0	----	----	----	----	17.90*	----	----	----	----	SE.	Southern Pacific Co.
Eureka.......... "	42.2	54.0	28.0	48.0	36.3	11.7	25	18 26	84.5	3	7	21	SE.	Signal Service U.S.A.
Fresno.......... "	42.0	58.0	24.0	50.0	34.3	15.7	13	2.12	81.9	6	13	12	E.	" " "
Keeler. .... "	35.2	59.0	16.0	45.2	26.8	18.4	1	0.42	53.4	21	9	1	SE.	" " "
Los Angeles.... "	47.0	67.0	34.0	57.7	40.5	17.2	9	7.83	70.5	10	13	8	NE.	" " "
Monterey .... "	48.7	64.0	28.0	----	----	----	----	7 67	----	----	----	----	S.	Southern Pacific Co.
Napa........... "	39.4	53.0	26.0	44.8	34.0	10.8	22	9.4	----	8	10	13	SE.	Sta. Napa Ins. Asylum
Oakland......... "	44.4	57.0	31.0	----	----	9.2	----	10.2	88.2	10	7	14	SW.	J. B. Trembley, M.D.
Paso Robles.... "	40 4	55.0	23.0	----	----	----	----	6.75	----	----	----	----	S.	Southern Pacific Co.
Red Bluff....... "	40.4	54.0	22.0	45.7	32.6	13.2	22	6.55	79.1	8	7	16	SE.	Signal Service U.S.A.
Sacramento. ... "	42.0	58.0	29.0	48.3	36.8	11.5	17	6.62	81.6	13	7	11	SE.	" " "
San Diego....... "	51.0	66.0	35.0	58.4	43.6	14.8	9	2.79	74.8	15	11	5	NE.	" " "
San Francisco.. "	46.2	59.0	29.0	51.1	41.3	9.8	23	9.61	77.5	7	10	14	SE.	" " "
Santa Barbara.. "	48.4	64.0	33.5	56.8	39.3	17.5	6	5.3	69.0	20	5	6	W.	Hugh D. Vail.
Santa Cruz...... "	49 6	65.0	32 0	----	----	----	----	9.40	----	----	----	----	S.	Southern Pacific Co.
Yuma..........A. T.	50.6	80.0	30 0	63.4	39.5	23.9	0	T	60.9	24	5	2	N.	Signal Service U.S.A.

Blank (----) indicates data missing. *Rain and melted snow.

Occidental Medical Times.

JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: MARCH, 1890.

REPORT OF THE SUPERVISING SURGEON-GENERAL U. S. MARINE HOSPITAL SERVICE.

The Annual Report of the Supervising Surgeon-General of the U. S. Marine Hospital Service for 1889, is a bulky volume, containing a great deal of interesting and valuable matter. In addition to the routine work of the service, the especial interest of the report centres in the epidemic of yellow fever that prevailed in Florida during 1888. This has been dealt with in an exhaustive manner, and will constitute a most valuable contribution to the literature of the subject. Several matters in which California is intimately concerned are also embodied in the report.

Dr. John Guitéras contributes a paper upon the "Diagnosis of Yellow Fever," derived from his experience as medical officer at Camp Perry, the probation station in Florida, to which refugees were sent. He says that the diagnosis rests upon three cardinal symptoms, the facies, the deviation from the general law of correlation between pulse and temperature, and the albuminuria. For early diagnosis he relied exclusively upon the first, and in the great majority of cases this was sufficient. In fact, he is satisfied that the facies may sometimes be observed before the onset of the fever. The real difficulty of diagnosis is when mild cases of yellow fever are to be distinguished from forms of ephemeral fever. Here the three symptoms already mentioned, must be relied upon. He alludes to the fact that children are very liable to yellow fever, and this is to be considered in tracing the origin of an epidemic, the infantile mortality often showing its presence before cases have been diagnosed in adults.

Dr. C. Fagét's article on the "Treatment of Yellow Fever" is profusely illustrated by pulse and temperature charts and case histories. He says it is more difficult to say what to do in yellow fever than what not to do. Anything that has a tendency to weaken the patient should be avoided. Purgation, overheating and sweating are irrational; the patient will do as well without these interferences, and will be more comfortable. He also objects to powerful diuretics. His general plan is: "Make your patient comfortable, and keep up his strength by proper alimentation, and you will have as good a proportion of cures as by any other treatment, however varied." In connection with the possibility that the grounds at Camp Perry might have become infected, he mentions autopsies performed upon two little pigs which had died there. The liver of both was the identical liver of yellow fever; the heart and kidneys were also found degenerated, very pale and yellow. There are several other valuable and interesting papers upon the epidemic, and this portion of the report will well repay perusal. Ignorance and cowardice upon the part of the people, and numerous illiterate practitioners, had much to do with the spread and prevalence of the fever. A sample of the latter, in reply to a question, as to the nature of a case of yellow fever under his charge, said: "Sah! speaking conscientiously and autopsically, I pronounce it malarial fever."

The proposed quarantine station at San Francisco will soon be an accomplished fact, and "it is intended to provide this station with a most complete equipment." Detailed descriptions of these are given with, illustrative drawings. Plans for the buildings, wharfage, etc., at Hospital Cove are also included. When properly equipped this station will have no superior as regards situation. Opposition to its selection came from many sources, but excluding various imaginary or sentimental objections. the only one that deserves consideration is that of seafaring men that there is no water for large vessels, nor space for vessels of any size to anchor or swing. In reply to these it may be pointed out that in selecting a quarantine station, the first requirement is a site for the necessary buildings, wharfage, etc., vessels in quarantine being anchored at any suitable point in the vicinity. We have already alluded to the numerous advantages presented by the site, and trust that the beautiful little cove will soon be utilized for this excellent purpose.

Dr. Preston H. Bailhache, in charge of the hospital at San Francisco, alludes to the necessity of accomodation for phthisical patients other than at San Francisco. He says: "It is pitiable to see men suffering with incipient phthisis enter the hospital at this port where certain death awaits them if they remain." He recommends that a hospital be provided at the proposed quarantine station at San Diego, where this class of sufferers can be best cared for. It has already been recommended by Dr. H. W. Sawtelle that San Diego "be designated as a relief station of the first class as soon as practicable."

Dr. George M. Sternberg's report upon "The Prevention of Yellow Fever by Inoculation" is included in this volume. Amongst the detail work of the service the "reports of fatal cases with necropses" is an excellent feature, peculiar we believe to this department. It provides a great deal of valuable pathological material for reference. The total number of sick and disabled seamen furnished relief during the year was 49,510; the number treated in hospital being 13,729, with 475 deaths. As a whole the report shows that a great deal of good work is being done by the department, while its conduct in the epidemic of yellow fever demonstrates that it can be relied upon in a national emergency.

NOTES.

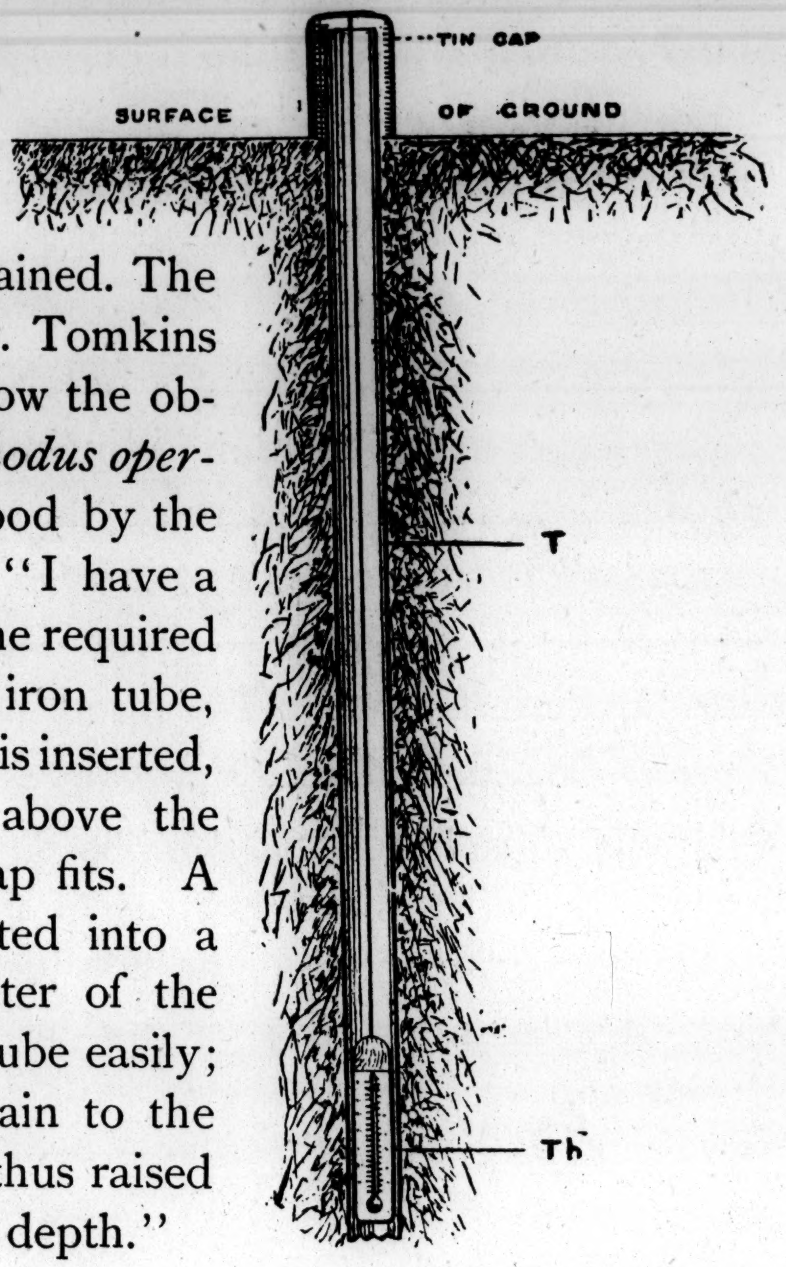
LA FRANCE MÉDICALE has become a weekly, appearing on Fridays, instead of tri-weekly. It has been considerably enlarged, and several changes have taken place in the editorial staff.

American Medical Association.

The forty-first annual meeting of the American Medical Association will be held at Nashville, Tenn., commencing Tuesday, May 20th, and continuing until Friday, 23d. There will be the usual exhibition of pharmaceutical, surgical, and sanitary products and appliances, provided that a sufficient number of applications have been received by the third Tuesday in March. All applications must be made prior to the third Tuesday in April. DR. J. BERRIEN LINDSLEY is the Chairman of the committee in charge.

Earth Temperatures.

. In an article "On the Circumstances under which Warm Weather Determines the Prevalence of Cholera Infantum" (*vide* MEDICAL TIMES, Vol. III, No. 10), DR. DAWSON WILLIAMS refers to some observations of DR. HENRY TOMKINS, Medical Officer of Health for Leicester, on the relation of the earth temperature to this question. We have received several inquiries as to how this temperature was obtained. The following explanation by Dr. Tomkins (*Brit. Med. Jour.*) shows how the observation is taken, and the *modus operandi* can be clearly understood by the accompanying engraving. "I have a hole dug in the ground to the required depth [4 feet]; into this an iron tube, about 1¾ inches in diameter is inserted, projecting about 3 inches above the surface, over which a tin cap fits. A delicate thermometer is fitted into a wooden holder, the diameter of the latter such as to just fit the tube easily; this is connected with a chain to the outside of the tin cap, and thus raised and lowered to the required depth."



The State Society—Rates and Fares.

The Committee of Arrangements has been working diligently to promote the success of the coming meeting of the State Society. The following rates, from all points to Los Angeles, have been procured for physicians and their families. The Southern Pacific Company will give a rate of one and one-third fare. Certificates of attendance must be presented within 48 hours after adjournment, and tickets used, within 48 hours after issuance. The Santa Fé will issue tickets on the same terms. The Pacific Coast Steamship Company requires evidence of attendance and journey to San Pedro by its steamers, and will give the following: San Francisco, to and return, $19.00; Monterey and Santa Cruz, $18.35; Port

Harford, $14.60; Santa Barbara, $5.60; San Buenaventura, $4.85; San Diego, $6.35. This includes berth and meals both ways, and is good until April 27th. Time of departure can be learned at each place named. Members should take receipt from agent selling ticket, which will be evidence that they came by steamer. The Westminster and Nadeau hotels will furnish rooms and board at $2 a day, and the Hollenbeck at $2.50. Each hotel offers rooms alone at $1.00. DR. W. D. BABCOCK, of Los Angeles, is the Chairman of the Committee of Arrangements, to whom all inquiries should be addressed.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, December 17, 1889.

H. L. NICHOLS, M. D., in the Chair.

Erasion of the Knee Joint.—DR. T. W. HUNTINGTON reported a case in which the operation of erasion of the knee had been performed. The patient, who had been before the Society six months ago, was again exhibited. There had been then some question as to the permanency of the operation, and the case had therefore been again brought forward. One year had elapsed since the operation. There is at present no fluid in the joint. Locomotion and power of extension perfect, and flexion about three-fourths.

Renal Abscess.—DR. J. R. LAINE exhibited a patient who was passing large quantities of blood and pus in the urine. Specimens of the latter were shown. The trouble had existed for over a year.

DR. T. W. HUNTINGTON read a paper on "Aspiration and Antiseptic Irrigation of the Knee Joint."

DR. W. R. CLUNESS had had no experience with the treatment mentioned. In view, however, of the failure of the old methods, he had no doubt that this was the correct plan to pursue. He believed that heretofore we had been too fearful in interfering, surgically, with joints. Thirty years ago he remembered having an interview with the late Ezra S. Cooper, in which that surgeon particularly urged the advisability of operating freely upon joint cases when necessary.

DR. G. L. SIMMONS had had no experience in the particular direction mentioned in the paper. In acute injuries to joints he had certainly seen recoveries follow rest in bed and local applications. Regarding the point which Dr. Cluness had made in connection with Cooper's work in joint surgery, he thought that the work of the early California operators should be remembered. In many cases of acute knee joint trouble, Cooper had treated the cases boldly, and though ignorant of antiseptic surgery, he had, however, followed the principles very closely. He laid the joint open, washing it out with alcohol and water, bandaging from below upwards, and providing for free drainage. This course was freely denounced at the time, but was successful as a demonstration. The speaker said that he had treated similar cases in this manner; some were tuberculous, others chronic, but the result had been successful.

Dr. J. R. Laine had had insufficient experience in this direction, but was aware that this course had been freely pursued of late years. The general practitioner was rather at a disadvantage in these cases, as proper facilities were often not obtainable in private practice.

Dr. H. L. Nichols had frequently aspirated the lesser joints. He believed with Dr. Simmons that many acute cases had been cured by rest and counter-irritation. He remembered that thirty years ago, Dr. Bauer, of New York, used to puncture the hip-joint in the early stages of morbus coxæ, and he was very successful in the results attained.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, January 13, 1890.

The President, J. F. Morse, M.D., in the Chair.

Dr. D. W. Montgomery, in the absence of the author, **Dr. W. Watt Kerr**, read a paper upon "An Interesting Case of Cerebral Tumor," (*vide* Medical Times, Vol. IV, No. 2.)

Dr. J. H. Stallard described some cases resembling that reported, which had come under his observation and where *post-mortem* examination had revealed the presence of a tumor.

Dr. A. Abrams remarked that a serious difficulty always exists in the determination of the seat of the lesion, whether it be in the cortical or subcortical region. The localization of cerebral functions has but recently begun to receive the attention it deserves, and now motor localization has attained precision. Gummata should always be operated upon when it appears to be necessary, as they are always near the surface.

Dr. H. M. Sherman described the case of a former resident of this city, who after a long course of treatment for various ailments, finally succumbed, and the *post-mortem* examination revealed the presence of a tumor.

Dr. G. H. Shiels agreed with Dr. Abrams as to the difficulty of localizing brain lesions, whether in cortical or subcortical substance, and was of opinion that in cases of this kind, as many opinions of representatives of all branches of the profession should be had as were obtainable.

Dr. A. P. Whittell remarked the absence of any mention, in the case reported, of the condition of the optic nerve and retina, and urged the necessity in all cases of cerebral lesions, of using the ophthalmoscope as a most important aid in the diagnosis of such cases.

Dr. D. W. Montgomery described an autopsy at which he had assisted. All indications during life had pointed to the probable existence of a brain tumor, and there were several symptoms supporting this view, but no trace of disease was discovered, and to all appearances the brain was perfectly healthy. The sloughing of the cortical substance in the case reported by Dr. Kerr was unaccountable.

Regular Meeting, January 28, 1890.

The President, J. F. Morse, M. D., in the Chair.

Lateral Dislocation of the Knee Joint.—**Dr. G. F. Shiels** exhibited a case of lateral dislocation of the knee joint, where the injury had been produced by the patient falling while his foot was caught in the "kink" of a rope. The patient had made a good recovery; he was able to walk without assistance, and to bend the limb at the knee joint.

Dr. E. G. Frisbie had seen a similar case about a year ago, with the exception that the dislocation had been spontaneously reduced before he saw the patient; but the internal lateral ligament had been completely ruptured, so that the finger could be introduced between the tibia and the femur. The limb was kept in plaster of Paris for nine months, and the patient is now able to walk with scarcely any perceptible lameness.

DR. J. H. STALLARD mentioned a case of gunshot wound into the knee joint, from which the patient recovered. The case was interesting, as showing the recuperative powers of the tissues, which permitted recovery from an injury that would previously have been regarded as requiring amputation.

Cerebral Tumor—Removal—Death.—THE PRESIDENT reported an operation for cerebral tumor. The patient, a man 39 years of age, suddenly became dizzy while at work, and fell to the floor in an unconscious condition. There were not any convulsions, but he afterwards suffered continually from headache, vertigo, and mental dulness. After this, the patient, at intervals, suffered from convulsions of the left upper limb, unaccompanied by loss of consciousness, but followed by headache, vertigo, and emesis. Briefly stated, his condition consisted of paresis of left lower facial muscles and left upper extremity. Dynamometer, R. 42, L. 22; no anesthesia. Left lower extremity, normal; cranial percussion, negative. Diagnosis: Tumor lower ⅓ gyrus pre-centralis. Under large doses of iodide of potash, he so far improved that the paresis of the left lower facial muscles disappeared, but that of the lower extremity, with the convulsions, continued. The eyes were normal. The speaker, at the request of Dr. Hirschfelder, trephined immediately in front of the right parietal eminence, and enlarged the opening until it was two inches long and one and a half inches in width, when a circular, gelatinous and semitransparent nodule was revealed. The dura mater was opened by a crucial incision, and the flaps dissected up from the growth. The cyst was evacuated, leaving a cavity about the size of a hen's egg. But little hemorrhage occurred, the vessels in the diploë being plugged with catgut. Before closing the dura mater, Monsell's salt was applied to the bleeding points, iodoform to the traumatic surface, and a catgut drain secured in the wound, which was then closed with catgut stitches and dressed with antiseptic precautions. Two hours after the operation, the patient revived sufficiently to recognize and speak to the nurse. Between the hours of 7 P. M. and 11:30 P. M., he had about twenty convulsions, but none after that time. Left upper extremity completely paralyzed; some motion in left lower extremity. Right side moved violently and with great force, and had to be restrained. The patient gradually sank, and died the following day. *Post-mortem* examination revealed the cyst cavity and an indurated mass at the lower third of the fissure of Rolando. Sections of the tumor, examined under the microscope, had the appearance of a round cell sarcoma.

Aphasia and Paresis Following Stab Wound.—Another interesting case was that of a man who had been stabbed with a pen-knife just above the left frontal eminence; and the injury resulted in aphasia, with paralysis of the opposite side. The brain symptoms suggested the existence of a clot pressing upon the organ, or that the point of the knife was imbedded in the brain substance. Upon opening the skull, the point of the knife was found, as well as a very large clot beneath the dura mater; and after their removal the patient recovered consciousness, but was very unruly, and tore the dressings from his head. A second clot was removed; but, although there were no inflammatory symptoms, the patient gradually sank and died.

DR. H. W. YEMANS said that he had made the autopsy in the last case referred to by Dr. Morse, and found that the knife had entered the left lateral ventricle, which was full of blood; there were also some inflammatory changes in the brain. He mentioned a case in which a man had attempted suicide by firing a bullet through his forehead to the occipital bone. There was very little hemorrhage; and, during the several hours that elapsed between the injury and death, the reflexes remained intact, the pupils reacted to light, and even the plantar reflex was unchanged. In another case, a man received a blow above the ear which caused him to fall, striking the occiput upon the stone sidewalk. He died three days after the injury, and the autopsy showed the skull to be very thin, that there was a fracture of the temporal bone, the anterior lobes were extensively injured, and the brain was split fore and aft, through its entire extent.

Dr. F. W. D'Evelyn remarked that, during the Kaffir war, an officer's carbine burst, and the breech lodged in the skull, to the right of the median line. The patient refused to have it removed, and lived for three years without suffering from any special symptoms. Recently he had been called to attend a gentleman who had fallen down stairs, and found him suffering from stertorous, blowing, breathing, which suggested compression. The patient remained conscious for thirty-five minutes after the accident; but there was some difficulty in arriving at a diagnosis, as he was blind in both eyes, and suffered from an old hemiplegia of the right side. Loss of speech, with all general and special sensation, followed the accident. In about five hours, Cheyne-Stokes respiration set in, but disappeared again in about twelve hours, to give place to short, stertorous breathing, with rapid and irregular pulse until death ensued from edema of the lungs, after fifty-five hours had elapsed. He could not obtain a *post-mortem* examination, and was, therefore, unable to report the precise character of the injury, which would have been very interesting, as it was rare for any one to live after the appearance of Cheyne-Stokes respiration.

Dr. H. M. Sherman mentioned the case of a man who had attempted suicide by firing a pistol at his occiput. The bullet divided, one part going up beneath the scalp, while the other entered the brain. The patient walked to hospital, could speak, and twenty-five hours afterward a left hemiplegia developed. An aspirator needle introduced into the cerebellar fossa, removed a large quantity of blood, but the patient soon expired from edema of the lungs. In another case the patient received a shot above the right ear, and continued walking about, but in a very excited manner. The wound was enlarged, and the track of the bullet followed into the pharynx, without finding the foreign body; so a drainage tube was put into the wound, and the patient went to sleep. Next morning there was no paralysis, and he could speak; but on removing the bandages the bullet was found in the dressing, where it must have been forced by the pulsations of the brain, as the position of the patient made it impossible for it to gravitate in such a direction.

Cerebral Tumors—Dr. J. O. **Hirschfelder** mentioned the case of a man with loss of vision from atrophy of the optic nerves, which was complete on the left side and nearly so on the right; there was also paresis of the left facial muscles, the left arm and leg, that of the arm being greater than that of the leg. For about a year he had suffered from occipital headache, vertigo, emesis not associated with disorders of digestion, and unilateral convulsions, commencing in the left side of the face and extending to the arm and then to the leg; these convulsions were not attended by loss of consciousness, and sometimes they began in the hand. There was no history of syphilis, and as anti-syphilitic treatment produced no beneficial results an attempt was made to remove the tumor by operative measures and this was followed by the death of the patient. The dura mater was found to be thickened over the gyrus post-centralis and in the subjacent brain tissue was a soft glioma which extended so far into the surrounding substance that it could not be entirely removed. Another interesting case was that of a woman, at present under treatment, about 50 years of age, who suffers from pain in the head, vertigo and vomiting; she has a hemiopia on the left side of both eyes, and the ophthalmoscope shows optic neuritis or choked disc on either side. The trouble is very evidently due to the presence of a tumor on the left optic tract. The patient has improved somewhat under the use of large doses of iodides, although there is no reason to believe that any syphilitic taint exists. In regard to the use of iodide of potash in such cases one must not be deceived as to the nature of the case by the improvement produced by the drug, for under its administration in large doses (from 1 to 4 drachms in 24 hours), tumors of a non-syphilitic character will also improve.

DR. W. P. GIBBONS mentioned a case in which a rifle ball had entered the skull and destroyed the brain to such an extent that fully two tablespoonfuls of cerebral matter escaped. The wound healed up and the patient seemed to progress favorably for several months, when he began to suffer from epileptic attacks, and afterwards became a maniac.

THE PRESIDENT had seen the patient referred to by Dr. Gibbons, and had reopened the wound in the hope of finding a spiculum of bone or some other irritant which would explain the convulsions, but could not discover anything beyond a thickening of the dura mater.

Hypertrophy of the Heart—DR. F. W. D'EVELYN exhibited a hypertrophied heart which weighed 48 ozs., and measured 8½ in. from base to apex with an auricular diameter of 6¼ in. The walls were very much thickened, and the cavities, especially the left ventricle, largely dilated. The tricuspid, mitral and pulmonary valves were healthy, but rendered useless from relative incompetence; the aortic orifice was very much distended and the wall of the vessel was studded with great atheromatous flakes, and a small aneurism which had formed in the wall was almost eroded. The orifice of one coronary artery was nearly obliterated by atheromatous deposit. The segments of the aortic valve were shrivelled, puckered and totally incompetent. The compensation had doubtless been unusually pronounced in the early stages of the disease.

SPECIAL CORRESPONDENCE.

LONDON.

[FROM OUR OWN CORRESPONDENT.]

The Jenner-Pasteur Institute.—The Secession from the British Medical Association.—The Local Application of Cold in Pneumonia.—Acromegaly.—Primary Tuberculosis of the Iris.—Tuberculosis in Animals.—Notification of Infectious Diseases.—The Influenza.—Natural Leprosy Fund.

The last Lord Mayor of London raised a Pasteur fund, to defray the expenses of four persons, who had been bitten by rabid dogs, while journeying to and attending the Pasteur Institute in Paris. There has grown out of this a very much more important movement, which is receiving the support of all the most influential biologists and chemists in the country, as well as of the Royal Society and the British Medical Association. It is proposed to establish a pathological institute for the study of human and animal preventive medicine, especially in relation to bacteriology. The main objects of the institute will be: (1) The preparation of the material which has been found successful for preventive inoculation against such diseases as anthrax, quarter evil, rabies, etc. (2) The carrying out of inoculations against such diseases, in which the necessary operations require to be performed by trained men of science. (3) To send out with due precautions, to those requiring it, the modified virus to protect against diseases of animals. (4) To carry out investigations fitted to increase our knowledge of the nature of disease-producing microbes, with a view to improving the hygienic measures by which infectious diseases may be prevented. This bacteriological institute of preventive medicine will probably be called "The Jenner-Pasteur Institute," and the present intention is to locate it at Cambridge, where it could be affiliated with the large and well equipped Pathological Institute of the University. One of the first subjects which will be taken up by the new institute, if money can be found for its foundation, will be the relationship between vaccinia and variola; thus continuing the work of one of its godfathers. The study of anthrax and of rabies point its relation to its other godfather; while the investigation of pleuro-pneumonia of cattle, of foot and mouth disease, and of distemper, will serve to mark its value to veterinary science, and to further disprove the favorite assertion of the antivivisectors, that experimental pathology works only for the benefit of man at the cost of the lower animals. If this great scheme can be accomplished, and it has the support of some very active spirits, it will mark a distinct advance in the task of educating public opinion, and will remove the reproach that wealthy England has lagged behind small university towns in Germany.

We have, apparently, at length got to the end of the agitation in certain metropolitan cities against the British Medical Association and its journal. The discontented members, to the number of about seventy, have handed in their resignation. The mere numerical loss will hardly be noticed from a roll of nearly thirteen thousand members (the precise number mentioned in the report presented by the Council to the annual meeting, in August last, was 12,897), but there are some names in the list which will be seen with regret. Among the physicians are Drs. Matthews Duncan, Douglas Powell, Eustace Smith, and Robert Cory. Among the surgeons, Thomas Bryant, Christopher Heath, Berkeley Hill, Edmund Owen, and Frederick Treves. To these names may be added those of the three secretaries of the Agitation Committee (Drs. John Williams, W. H. Allchin, and W. W. A. Meredith), and of Mr. A. T. Norton, the editor of the *Medical Press and Circular*, a little paper which has for years indulged in almost weekly attacks on the *British Medical Journal*. I doubt whether any other names on the list would be at all known in America, and I therefore refrain from copying them. I also refrain from suggesting the motives which have led these seventy gentlemen to agree that "the present conduct of the *Journal* is discreditable to the Association." Rumor says that an attempt to draw up a document giving intelligible reasons had to be abandoned, owing to the impossibility of any agreement among the discontented. A great many signatures have been appended in sheer ignorance of the work of the Association; others are those of friends or colleagues of Mr. Edmund Owen, who probably consider that the rebuke administered to that surgeon by the editor was more severe than was deserved; a certain smaller proportion are the signatures of men who have been for years conscientiously opposed to the whole policy of the association and its journal. Sir Joseph Lister, who was the chairman of the Agitation Committee, refused to resign, and his example has been followed by nearly all the leaders of the profession, including the Presidents of the Royal Colleges of Surgeons in England, Edinburgh, and Ireland, the Presidents of the Royal Colleges of physicians in London, Edinburgh, and Ireland, and the President of the General Medical Council.

The treatment of acute pneumonia by the local application of cold is not a new thing, but a good deal of attention has been given to it recently in London, with the result that while all admit that when carefully managed it does no harm, many have been convinced that it is a very useful therapeutic agent in these cases. The application most popular at the present time is the ice-bag. Dr. Lees recommended that when the temperature falls to 100° F. the bag should be removed, but reapplied as soon as it rises to 102° F. again. In a certain small proportion of cases the treatment appears to cut short the disease; in a larger proportion it gives great relief to symptoms, while in few only did it cause any serious depression. It seems to be particularly useful in the croupous and bronchopneumonias of children; but should not be used in very feeble children, in aged persons, nor in adynamic conditions.

The curious way in which, when interest in a particular form of disease supposed to be very rare is aroused by some striking paper, other cases come shortly after to be reported, is illustrated by the history of our knowledge of acromegaly. This extraordinary disorder, characterized by enormous overgrowth of the features of the face, of the extremities, and often of other parts of the body, was only described a few years ago by a French physician. Virchow's paper and demonstration last year attracted great attention to the subject, and since then a considerable number of cases have been exhibited. No less than three were shown at the last meeting of the Clinical Society of London.

A point of some practical importance was raised at the last meeting of the Ophthalmological Society by Dr. Hill Griffith, of Manchester, on primary tuberculosis of the iris. The paper was, however, of wider significance since the consideration of the treatment of this affection, involved that of intra-ocular tubercle generally. Dr. Griffith had collected 32 cases, in 29 of which one eye only was affected. The eye was enucleated in 27 cases and in a considerable proportion the patient did not, so far as could be ascertained, suffer from general tuberculosis Some cases had been kept under observation for five years. Against enucleation are the facts that it is impossible to be absolutely certain that the intra-ocular lesion is the primary tubercular lesion, that some of the milder cases get well easily, and that in some cases the operation is immediately followed by tubercular meningitis and death. Where, however, the eye is becoming rapidly disorganized there ought to be no hesitation in performing enucleation.

The propriety of placing tuberculosis in the schedule of diseases to which the provisions of the Contagious Diseases (Animals) Act applies, is being urged on the authorities in many quarters. Glasgow has taken the lead, and Belfast is now following suit. There is a general agreement as to the danger of using milk from tuberculous cows, since it is admitted that the milk may be infective even when there are no signs of tuberculous mammitis. The main controversy is as to the use of the flesh of tuberculous oxen for food; the butchers maintain that local tuberculosis, as of the pleura, ought not to be considered sufficient cause for condemning the whole carcass. It is not easy to prove that this opinion is dangerous, though few pathologists will be inclined to accept it. The notification of Infectious Diseases Act has come into force in London, and has been adopted by a very large number of prominent towns. In future any medical man called to attend a case of "small-pox, cholera, diphtheria, membranous croup, erysipelas, the disease known as scarlatina or scarlet fever, and the fevers known by any of the following names: Typhus, typhoid, enteric, relapsing, continued, or puerperal," must notify the Medical Officer of Health for the district. A form of certificate for this purpose is supplied by the local sanitary authority, and the practitioner notifying is entitled to a fee of two shillings and sixpence for cases occurring in private practice, and of one shilling for cases occurring in a public institution, such as a hospital. One town—Kidderminster—placed measles on the local list of diseases to be notified, and has already run up a bill for £100 in fees to the great astonishment and perplexity of the Town Council.

The epidemic of influenza reached us about Christmas, but has only begun to prevail extensively since the new year began. As usual, it appeared early in the postoffices, and many people see in this a confirmation of the opinion that the infection may be carried by letter. It must, however, be added, that the first cases at the General Postoffice occurred in the telegraph department, which is in a building quite separate from the letter department; are we therefore to suppose that the infection was carried by the electric current? This would be indeed another "danger of electricity!"

There is to be a big charity dinner on January 13th, in aid of the National Leprosy Fund. The suggestion has disgusted a good many people, and it is certainly carrying the national custom to an extreme. It will, however, be a success, for the Prince of Wales is to take the chair, and his popularity is great enough to insure a large attendance and liberal subscriptions. It is intended that the interest arising from the fund shall be devoted to the medical treatment and care of indigent lepers in the British Empire, and that a sum of money shall be vested in trustees for the endowment of two studentships, one student to make the United Kingdom and the remainder of Europe his field of investigation, and the other to go abroad and study the disease in India, China, the colonies, and elsewhere.

London, February 1, 1890.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

La Grippe.—The Treatment of Diphtheria.—Balsam of Peru in Tuberculosis.—Psoriasis.—Animal Heat and the Production of Urea.

The prevailing epidemic, which has not yet been officially christened, but is most generally called here *grippe*, holds all Paris in its grip; few have escaped being attacked by it, and probably before it leaves none will have been left untouched. The last few weeks the benign character of the epidemic has shown an alarming tendency to become malignant. At the outset of the epidemic, the most serious symptoms were severe headache, dorsal and lumbar muscular pains, and, in the most cases, intestinal disturbance, in rare instances going on to dysentery. Death was not apprehended; "disagreeable but not dangerous" was the universal description, both in lay and medical circles, of this disease. At present the more dangerous complications are combined with dangerous pulmonary symptoms. The death rate of Paris is now 110 *per diem* more than at the corresponding date in 1888. A tuberculous condition is considerably and rapidly intensified by an attack of grippe. Bronchitis, pneumonia, broncho-pneumonia, sets in with an attack of grippe, and in many instances cause death. Dr. Potain has observed that in most cases the spleen becomes enlarged. A large number of medical men endorse his assertion; which, as he says, tends to prove that the "grippe," now visiting the whole of Europe and passing on to the New World, is of an infectious character. Large doses of sulphate of quinine, before the symptoms are actually manifested, will in some instances arrest the attack, and always render it less violent. During its preliminary period it is beneficial to take a great deal of open air exercise, and eat and drink freely, in order to help the elimination of the poisonous products of the microbe at work in this illness. The schools and *lycées* under the jurisdiction of the Ministers of War and Public Instruction have been closed. Six hundred postmen have been obliged to go off duty. There are so many soldiers attacked in the different French towns, that they have to be treated in the barracks. All the hospitals are overcrowded. Trade has suffered; butchers and bakers have incurred considerable pecuniary loss. Impaired appetite seems to be general, even with those who are not "grippe's." Paris has seldom seen so sad a Christmas and New Year's day. Those who are not actually ill are, at the best, convalescent, or apprehending a visit from Mme. La Grippe.

In a comprehensive review of the nature and treatment of diphtheria, MM. Critzman and Thiroloix describe the methods of treatment adopted by the most competent authorities on this affection. M. Gaucher's method is as follows: (1) The false membranes are removed thoroughly, but gently, by means of Dr. Cresantigne's swan-skin brushes. (2) The bucco-pharyngeal mucous membrane is painted with the following mixture:

Camphor	gm. 20
Castor Oil	gm. 15
Alcohol at 90°	gm. 10
Crystallized Carbolic Acid	gm. 5
Tartaric Acid	gm. 1

The ablation of the false membrane and the application of the above mixture are repeated every three or four hours, or oftener if necessary. Irrigations with carbolic acid are practised every two hours. In the case of adults, gargles with carbolic acid solution (1:1000) are also prescribed.

M. Hutinel's method of removing the false membrane and painting the throat is the same as M. Gaucher's, but he substitutes pure glycerine for castor oil in the mixture applied to the mucous surface. The irrigations, which are repeated every two hours, even in mild diphtheria, are made with the following solution:

Boric Acid	gm. 40
Distilled Water	gm. 1000

M. Hutinel strongly advocates spraying with boric acid, effected every half hour with M. Championnière's atomizer. The instrument is placed as close to the mouth as possible, in order that the liquid may preserve a certain degree of heat. He also recommends M. Renou's method of surrounding the patient with acid vapors. He keeps two sauce-pans, each containing two quarts of water, on a fire in the room. Every three hours a tablespoonful of the following solution is poured into the sauce-pans:

Carbolic Acid	gm. 280
Salicylic Acid	gm. 56
Benzoic Acid	gm. 112
Purified Alcohol	gm. 468

M. Jules Simon, physician at the Hôpital des Enfants Malades, insists on the necessity of vigorous local treatment. He employs two forceps, around which absorbent cotton is bound. The first serves to cleanse the throat thoroughly; the second, the cotton on which is impregnated with the following mixture, to attack the false membrane:

Salicylic Acid	50 cgm. to 1 gm.
Alcohol	q. s. to dissolve
Glycerine	40 gm.
Eucalyptus Infusion	60 gm.

The operation is repeated hourly during the day and three times during the night. When the false membrane is unusually thick and adhesive, M. Simon, in addition to the above treatment, applies the following solution two, three or four times a day:

Perchloride of Iron	
Glycerine	aa. gm. 10

M. Simon is also an advocate of irrigating and spraying. M. Marais applies perchloride of iron, which he regards as the most efficient antiseptic, twice a day. The operation lasts from ten to thirty minutes. The brush or sponge employed is washed carefully after each operation, and the patient is made to gargle with pure water. In the general treatment of diphtheria MM. Critzman and Thiroloix strongly condemn the practice of giving emetics. Alcohol and alcoholic wines are of great assistance. All liquid food should be given cold or iced. When deglutition is rendered difficult gm. 50 to 1 of antipyrine should be administered.

Internally, M. Simon recommends perchloride of iron. Children of five years and upward may take 10 to 20 drops in 24 hours. Henning has administered 20 to 30 gms. daily of lime water with good results. Hydrargyri cyanuretum and corrosive sublimate have been also recommended in the treatment of diphtheria.

M. Landerer has treated a series of cases of local tuberculosis of old standing (superficial ulcer, deep-seated fistula) by a new method, which gave excellent results. He covered the ulcer with balsam of Peru and injected a solution of the same into the sinus and placed therein tents saturated with the solution. For sub-periosteal and intravenous injections, M. Landerer employed an emulsion of oil of almonds and mucilage of gum arabic, prepared as follows: To 6 or 7 drops of a solution at $\frac{1}{16}$, and placed in a porcelain vessel, he adds a solution of sea-salt at 0.7 per cent., filtered and rendered alkaline by the addition of hydrate of soda. When the greyish yellow mixture turns green its alkaline reaction becomes evident. The emulsion thus obtained is at $\frac{1}{400}$ or $\frac{1}{500}$; it is again filtered, and is ready for use. When an intra-venous injection is about to be made the solution should be examined with a microscope; if oil globules larger than the red corpuscles of the blood are discovered, the emulsion is unfit for use. Fresh emulsions must be prepared every few hours, but the first concentrated solution may be preserved for several weeks. In parenchymatous injections M. Landerer plunges the canula perpendicularly as far as the bone, sometimes making as many as three injections into the fungous masses. He observes the following precautions in the case of intravenous injections. The arm and sometimes the leg are surrounded by an elastic band, so that marked venous stasis results. The vein is bared, anesthesia having been produced by cocain; the canula is plunged longitudinally into the vein. The injections are not followed by any local or general symptoms when effected with proper precautions. He considers that injections into the articular fungous masses may be safely recommended as an excellent method of treating tuberculosis.

M. Gailleton, of Lyons, recommends the following treatment for psoriasis. The affected parts are cleansed with alkaline baths and soap frictions. Dressings made with chrysophanic acid and pyrogallic acid ointment are prescribed. The former ointment ($\frac{1}{10}$ of the acid is employed) should be applied by frictions. The latter is adapted to cases of ordinary psoriasis, but not to acute psoriasis of scarlatinous form. Arsenic is the only substance which has a really preventative action on psoriasis, but it should never be administered during the acute period. Fowler's solution is prescribed in progressive doses (5 drops increased to 20). The following syrup may be given in doses of 2 to 6 spoonfuls daily. Each spoonful represents 1½ milligrammes of arsenic.

Arseniate of Soda	gm. 0.04
Syrup of Wild Pansies	gm. 60.
Distilled Water	gm. 1.80

In conclusion M. Gailleton recommends daily baths lasting from one to three hours. He attributes the success of his treatment in many cases to the prolongation of the baths.

MM. Berthelot and Petit have made researches concerning animal heat and the heat produced by the formation and creation of urea. They ascertained that the phenomena of hydration is an important factor in the production of heat. Urea, which constitutes the most considerable waste produced by the action of the organs, while being transformed into carbonate of ammonia throws out a notable amount of heat. When the quantity of heat produced by the different physiological operations can be exactly determined, it will be possible to ascertain the variations in the temperature of the organism, and the causes of these variations.

Paris, January, 25, 1890.

REVIEWS AND NOTICES.

CONGESTIVE NEURASTHENIA OR NERVE DEPRESSION. By E. G. Whittle, M. D. THE ART OF EMBALMING. By Benj. Ward Richardson, M D. THE ETIOLOGY, DIAGNOSIS AND TREATMENT OF TUBERCULOSIS. By Dr. H. von Ziemssen. PSYCHO-THERAPEUTICS OR TREATMENT BY HYPNOTISM. By Dr. Louis de Séré, No. 3, Vol. III. Wood's Medical and Surgical Monographs. New York: Wm. Wood & Co. Price $1.00.

The first brochure deals with the special characters of a common type of nerve derangement. The author attempts to show that the insomnia and depression of the affection are dependent on cerebral congestion, and illustrates the remarkable efficacy of blood-letting in its treatment. The "Art of Embalming" is an interesting monograph. The latest methods are very clearly set forth. After a careful perusal of the instructions given, every medical man may carry out the details himself with confidence and success. "The Etiology, Diagnosis and Treatment of Tuberculosis," by Dr. von Ziemssen, has already been noticed in a previous number of this journal. The brochure on "Hypnotism" is the most clear and concise review of this interesting subject which we have yet encountered. The author succeeds in detracting, however, from these excellent points by obtruding his personal experience, which shows him to be an extremist, vividly portraying, as he does, the never failing benefits of psycho-therapeutics. The last monograph considers a comparatively new and interesting subject, that of the many physiological and pathological results in man and woman following the critical period, which at this stage of life, present a gravity that is frequently formidable. The translation is too literal, and makes a proper conception of the subject difficult.

HYPNOTISM: ITS HISTORY AND PRESENT DEVELOPMENT. By Fredrik Björström, M. D., Head Physician of the Stockholm Hospital, Professor of Psychiatry, etc. Translated by Baron Nils Posse, M. G. New York: The Humboldt Publishing Company.

This publication is one of the most complete treatises upon hypnotism. It includes a history of the subject, as well as chapters upon the means or methods of hypnotism, physical effects of hypnotism, hypnotism as a remedial agent, and many other topics of great interest. The recent revival of hypnotism compels every medical man to give some thought to the matter, and to ask the question whether the therapeutic effects are not outweighed by the physical effects of hypnotism, the diminished individuality of the patient, and the great scope which such practices afford for the perpetration of crime. All these questions are very fairly discussed in the work before us. There can be no doubt that hypnotism is a very valuable remedial agent in the diagnosis and treatment of disease, especially in functional neuroses, such as hysterical paralysis, where, even in our own experience, cases that resisted all other forms of treatment have, however, been cured by suggestions conveyed to the patient while in hypnotic trance. On the other hand, it is equally true that the subjects of professional magnetizers, after only one or two experiments, have become sick and debilitated, and even melancholic and mentally deranged. The subject of hypnotism is one that demands our consideration, not only as physicians, but as men, for there is every evidence to show that hypnotic suggestion can be used to stimulate passions and further crime, and, therefore, in view of these considerations, it becomes our duty to urge the most stringent legislation that will take hypnotic exhibitions from the stage and confine the method to the practice of reputable physicians We recommend a careful perusal of the above work to all our professional brethren, that they may realize, to some extent, the gravity of a question that will soon be propounded to them.

ESSAY ON MEDICAL PNEUMATOLOGY; A PHYSIOLOGICAL, CLINICAL AND THERAPEUTIC INVESTIGATION OF THE GASES. By J. N. Demarquay, Surgeon to the Municipal Hospital, Paris, etc. Translated, with notes, additions and omissions, by Samuel S. Wallian, M. A., M. D., pp. xvi—300. Philadelphia: F. A. Davis; cloth, $2; Rus., $3.

In this translation the original treatise of Demarquay has been very much condensed without materially diminishing the practical value of the work, while the addition of much that is new in aërotherapy has brought the volume up to date, and presents to the reader a very fair *résumé* of the science of pneumatology. Most interest belongs to the chapters on oxygen, in which the preparation, physiological action and therapeutics of this gas are fully discussed. While many of the applications of gases in surgery are curiously interesting, it seems to us that equally good results can be obtained by easier and less expensive methods.

NEURALGIA; ITS ETIOLOGY, DIAGNOSIS AND TREATMENT. By W. R. Gowers, M. D., F. R. C. S. THE PROGNOSIS OF DISEASES OF THE HEART. By Prof. E. Leyden. THE SPUTUM: A CONTRIBUTION TO CLINICAL DIAGNOSIS AND PRACTICAL EXAMINATION FOR TUBERCLE BACILLI. By Peter Kaatzer, M. D. HYPNOTISM; ITS SIGNIFICANCE AND MANAGEMENT. Briefly presented by Dr. August Forel. THE FORMS OF NASAL OBSTRUCTION IN RELATION TO THROAT AND EAR DISEASES. By Greville Macdonald, M. D. Wood's Medical and Surgical Monographs. Vol. 5, No. 1. New York: Wm. Wood & Co. Price, $1.

Dr. Gowers' monograph is of greatest interest to the general practitioner and every physician will find it of much value. Dr. Gowers' opinion on nervous diseases is one of the best, and he has given us a discourse on the etiology, diagnosis and treatment of neuralgia quite up to the standard of his well-known ability. After a descripton of the etiology and pathology of neuralgia in general, he takes up the different varieties as regards situation, character and causes. A full description of the treatments that are to be adopted under the various conditions is given. Professor Leyden's paper on "The Prognosis of Diseases of the Heart," is well written and logical. It discusses the value of the various heart lesions in relation to the patient's probable length and usefulness of life. A physician's reputation will frequently depend upon his prognosis, and there is no disease in regard to which more pessimistic and erroneous prognoses have been made than the one under consideration. The subjects of the next two papers, on the diagnostic significance of sputum, and "Hypnotism," have been much discussed of late, and are of growing interest to every physician who keeps himself informed upon general scientific as well as special medical topics. The last paper on "Nasal Obstruction" is of great practical importance. The more this subject is studied the more far-reaching in their effects upon the general health are nasal obstructions found to be. The prominence they have received in recent years is well deserved, and no physician should fail to know their importance and treat them accordingly.

ANNUAL REPORT OF THE SECRETARY OF THE BOARD OF REGENTS OF THE UNIVERSITY OF CALIFORNIA, FOR THE YEAR ENDING JUNE 30, 1889. Sacramento: State Printing Office.

The Report is an exhaustive volume of 245 pages, conveniently arranged for reference, and containing matters relating to every branch of the University. During the last session of the Legislature, it will be remembered, that a bill was introduced appropriating a sum of money to erect a building for the Medical Department of the University. Some of the opponents of the bill, stated that the college was not an integral part of the Universiry, but was connected by title only. In opposition to these statements, we read on page 20 of the Report, matters relating to "resignations and appointments in the Medical Department of the University, San Francisco." On page 49 we notice the purchase of a lot for the Medical Department of the University, and on page 50 matters relating to the title of the college and its control. This effectually disproves the rumors which were freely circulated during the session of the Legislature.

BOOKS AND PAMPHLETS RECEIVED.

Some Physiological Facts Bearing on the Production of the Nasal Vowels. By B. Loewenberg. M. D. [Reprinted from the *Medical Press and Circular.*]

Subcutaneous Rheumatic Nodules. By Wm. A. Edwards, M. D. [Reprinted from the *University Medical Magazine.*]

Sanitary Entombment. By the Rev. Charles R. Treat. [Reprinted from the *Sanitarian.*]

The American Academy of Medicine—Its Objects, Its Signs of Promise and its Obstacles, Its Field of Work, and Some Suggestions Looking to an Increase of Its Efficiency. By Leartus Connor, B. A., M. D. [Reprinted from the *American Lancet.*]

Erythroxylon Coca; Its Value as a Medicament. By Marc Laffont, M. D. [Reprinted from the *New York Medical Journal.*]

Abdominal Section for Traumatism, with Tables of 234 Cases. By Thos. S. K. Morton. [Reprinted from the *Journal of the American Medical Association.*]

Monthly Nursing. By A. Worcester, M. A., M. D., Fellow of the Massachusetts Society, Physician to the Waltham Hospital. Second edition. New York: D. Appleton & Co.; pp. iv—250.

Handbook of Materia Medica, Pharmacy and Therapeutics, including the Physiological Action of Drugs, Official and Extemporaneous Pharmacy, and Minute Directions for Prescription Writing. By Sam'l O. L. Potter, M. A., M. D., Professor of the Theory and Practice of Medicine in the Cooper Medical College of San Francisco. Second edition, revised and enlarged. Philadelphia: P. Blakiston, Son & Co.; cloth, $4; leather, $5.

REPORTS, ANALYSES, AND NEW INVENTIONS.

Chloralamid.

We have received from Messrs. Lehn & Fink samples of Chloralamid, one of the latest of the new hypnotics. It is a white, crystalline powder, with a slightly bitter taste. It is sparingly soluble in water (1 to 9 parts), but readily soluble in alcohol. It should not be mixed with hot water, as it decomposes at 140° F. It is also decomposed by alkalies, and is best given in a slightly acid medium. The dose is from 30 to 45 grains. It is said to be a safe hypnotic, and free from depressing after-effects, producing sound and refreshing sleep in from 15 minutes to 2 hours and lasting for several hours. In cases of delayed action, the method of administration should be considered, as some of them can, no doubt, be explained by the drug having been given suspended but undissolved.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At the regular meeting of the Board of Examiners, held Feb. 5, 1890, the following physicians were granted certificates to practise medicine and surgery in this State:

G. Irwin Brinckerhoff, Oakland; Coll. of Phys. and Surgs., Chicago, Ill., Mch 10,'85.
Carl DeWolf Brownell, San Diego; Med. Dept. Univ. City of New York, Mch 6,'88.
Max M. Dittebrandt, Elgin, Oregon; Coll. Phys. and Surgs., Keokuk, Ia., Feb. 26,'89.
Wm. J. Hanna, Sacramento; Cooper Med. Coll., San Francisco, Nov. 12,'89.
Wm. Bateman Hayes, San Francisco; Royal University of Ireland, Oct. 28,'86.
Francis Marion Hicks, San Diego; Bellevue Hosp. Med. Coll., New York, Mch 1,'80.
Hector Kalliwoda, San Francisco; Med. Coll. of Ohio, Cincinnati, Mch 8,'87.
Robt. M. Kincaid, San Jose; McGill Univ. Fac. of Med., Montreal, Canada, Mch 31,'88.
John Kutch, Los Angeles; Med. Coll of Ind., Indianapolis, Feb. 28,'79.
Abel H. Martin, San Francisco; Cooper Med. Coll., San Francisco, Nov. 12,'89.
Squier R. Mather, Kelseyville; Med. Dept. Univ. of Cal., Nov. 14,'89.
W. Page McIntosh, San Francisco; Coll. of Phys. and Surgs., Baltimore, Md., Mch 1,'82.
Geo. Florian Pache, San Andreas; Cooper Med. Coll., San Francisco, Nov. 12,'89.
Richard H. Plummer (2d certificate), San Francisco; Royal Coll of Surgs., England, Aug. 1,'89.
Robert Lee Rierson, Dixon; Med. Dept. Univ. City of New York, Mar. 8,'87.
Truman H. Rose, San Francisco; Berkshire Med. Coll., Mass., Nov. 22,'53.
Chas. F. Wade, Chinese Camp; Cooper Med. Coll., San Francisco, Nov. 12,'89.

Dr. Guido Spitzy, of San Jose, was allowed to withdraw his application for a certificate, as he intends to leave shortly for Java, and meanwhile announced his intention of ceasing practice and devoting himself solely to the business of druggist.

On February 10th a certificate was granted to Urbain Jean François Beaudonnet, of Los Angeles; School of Medicine at Toulouse, France, July 22,'84.

CHAS. E. BLAKE, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from January 16th, 1890, to February 17th, 1890.

Surgeon S. T. Weirick will proceed at once from Fort Apache, Arizona, to Fort Stanton, N. M., and report to the commanding officer for duty. Par. 3, S. O. 7, Dept. Ariz., Jan. 16, 1890.

Captain Henry P. Birmingham, Assistant Surgeon, is relieved from duty as member of the general court martial appointed to meet at Vancouver Barracks (par. 1, S. O. 6, C. S.), and will proceed to Fort Canby and report to the commanding officer for temporary duty. Par. 1 and 3, S. O. 7, Dept. of the Columbia, Jan. 20, 1890.

Upon recommendation of the Acting Medical Director, Acting Assistant Surgeon M. M. Walker will proceed to Vancouver Barracks for medical treatment. Par. 4, S. O. 7, Dept. of the Columbia, Jan. 20, 1890.

Captain R. W. Johnson will proceed at once from Whipple Barracks, Arizona, to Fort. Stanton, N. M., and report to the commanding officer for temporary duty. Par. 3, S. O. 9, Dept. of Ariz., Jan. 22, 1890.

The Army Retiring Board appointed by War Department Order, dated January 8, 1890, to meet at Los Angeles, Cal., will meet for the examination of Major Leonard Y. Loring, Surgeon, at San Diego, Cal. S. O. 18, A. G. O., January 22, 1890.

Lieutenant-Colonel J. R. Smith, Surgeon, Medical Director of the Department, will proceed on public business to Fort Bayard, N. M., and upon completion will return to his station at Los Angeles, Cal. Par. 2, S. O. 14, Dept. of Ariz., Feb. 5, 1890.

Leave of absence for twenty days, to take effect about February 10th, is granted Lieutenant-Colonel J. R. Smith, Surgeon. Par. 2, S. O. 15, Dept. of Ariz., Feb. 8, 1890.

The extension of leave of absence on surgeon's certificate of his disability, granted Major Leonard Y. Loring, Surgeon, in S. O. 268, Nov. 16, 1889, from this office, is still further extended two months, on surgeon's certificate of his disability. Par. 7, S. O. 34, A. G. O., Feb. 10, 1890.

The leave of absence for seven days granted Major J. H. Patzki, Surgeon, in Orders No. 25, Fort Huachua, Arizona, February 12th, to take effect the 14th instant, is extended twenty-three days. Par. 1, S. O. 18, Dept. Ariz., Feb. 17, 1890.

Official List of Changes in the Medical Corps, U.S. Navy (Pacific Stations, from January 20th to February 20th, 1890.

Past Assistant Surgeon W. F. W. Weber, detached from U. S. R. S. "Independence," and ordered to U. S. Flag-ship "Charleston."

Medical Inspector G. W. Woods, detached from U. S. Navy Yard, Mare Island, Cal., and ordered to U. S. Flag-ship "Charleston."

Surgeon Dwight Dickinson, detached from U. S. Naval Hospital and ordered to U. S. Navy Yard, Mare Island, Cal.

Past Assistant Surgeon F. J. B. Corderio, detached from U. S. Naval Hospital, Mare Island, Cal., and ordered to U. S. S. "Nipsic."

Past Assistant Surgeon J. M. Edgar, ordered to U. S. Naval Hosp., Mare Island, Cal.

Past Assistant Surgeon E. H. Green, detached from U. S. S. "Alert" and ordered to his home.

Past Assistant Surgeon E. P. Stone, ordered to U. S. R. S. "Independence."

Medical Director Adrian Hudson, died at Naval Hospital, Mare Island, Cal., of pneumonia, February 7th.

Medical Director N. L. Bates, ordered in charge of U. S. Naval Hospital, Mare Island, Cal., to report March 1st.

ITEMS.

Orange County Medical Society.—The new county of Orange has not been backward in medical matters, its Medical Society having held its first annual meeting on February 18th. The Society numbers 14 members.

An Army Medical Board will be in session in New York City from May 1st to 31st, 1890, for the examination of candidates for appointment in the Medical Corps of the United States Army, to fill existing vacancies (7). Persons desiring to present themselves for examination by the Board will make application to the Secretary of War, before April 1, 1890, stating the place of birth, place and State of permanent residence, and enclosing certificates based on personal knowledge from at least two physicians of repute, as to professional standing, American citizenship, character and moral habits; also, statement of service in hospital from the authorities thereof is desirable. The candidate must be between 21 and 28 years of age, and a graduate from a *Regular Medical College*, as evidence of which his diploma must be submitted to the Board. Further information regarding the examinations and their nature, may be obtained by addressing the Surgeon-General, U. S. A., Washington, D. C.